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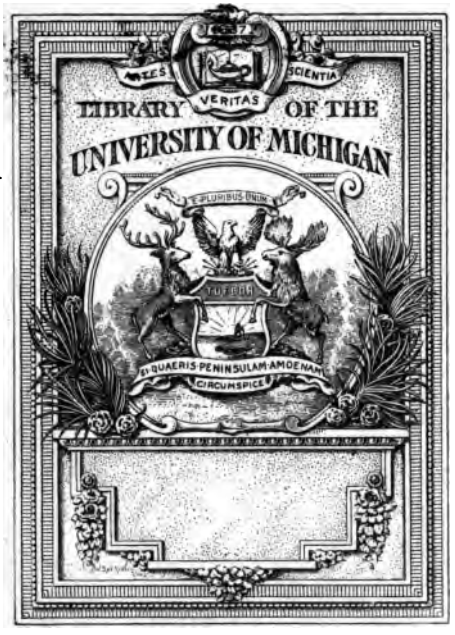

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THE

WESTMINSTER HOSPITAL REPORTS.

THE

WESTMINSTER HOSPITAL REPORTS.

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ERRATA.

Page 5, line 15, 1851 to read 1850.
,, 6, second line from the bottom, 1851 to read 1850.

A BRIEF SKETCH OF SOME OF THE VICISSITUDES

ENCOUNTERED BY THE

WESTMINSTER HOSPITAL SCHOOL OF MEDICINE

Between the years 1841 *and* 1854, *being a correction of the accounts published in the* 1*st vol. of the Westminster Hospital Reports by Mr. Cowell, and in the "British Medical Journal" of July* 20*th,* 1895, *by Mr. D'Arcy Power.*

By CARSTEN HOLTHOUSE, F.R.C.S.,

Consulting Surgeon to the Hospital.

So good an account of the Westminster Hospital and its Medical School is given by Mr. Cowell, in the 1st vol. of the Westminster Hospital Reports, that I should not have thought it necessary to add anything thereto, had it not been for a more recent sketch of the same events by Mr. D'Arcy Power in the *British Medical Journal* of July 20th, 1895, which, in justice to myself, I cannot allow to pass without notice. At the same time, it affords me an opportunity of correcting one or two chronological errors into which Mr. Cowell has fallen in reference to Dr. Hunter's retirement from the chair of Anatomy, and my own first connection with the School.

As correctly stated by both the above writers, several previous attempts had been made to establish a School of Medicine at Westminster in connection with the Hospital, and in 1834 some few of the staff raised a fund, wherewith premises for the express purpose of a Medical School were erected in Dean Street, on a part of the site where the Royal Aquarium now stands, but a majority of the Hospital Governors and staff being opposed to the undertaking, declined to support it, and denied its right to be called the Westminster Hospital School of Medicine. Under these circumstances its failure was foredoomed, and it was not until 1841 that, objections having been overcome and opposition withdrawn, with the general consent of the Governors and their Medical Staff, the School buildings in Dean Street were purchased, and the united School and Hospital, under the name of the Westminster Hospital School of Medicine, was at length established, and the School formally opened on October 1st, 1841.

Unfortunately this attempt was hardly more successful than the previous ones, for after an ephemeral existence of 5 years, by a succession of untoward events which could not have been foreseen, this School also came to grief, and a month had not elapsed before its troubles began, as seen by the following extract from a letter to the School of Medicine Committee from Dr. Hunter of Glasgow, who had accepted the chair of Anatomy. He writes, "three weeks of the Session have elapsed, and the vestige of a Class has scarcely yet been formed," and asks the Committee what they were going to do, as he had at great expense moved his Museum from Glasgow to London, and engaged a Demonstrator at a salary of £50 a year, and was seriously out of pocket, without a prospect of recouping himself by the pupils.

A resolution was thereupon passed by the School of Medicine Committee, who had, they said, "no doubt of the School's ultimate success, and would give their best consideration to any proposition which the Lecturers might recommend to meet the difficulties." It does not appear that any proposition, if made, was really efficacious, as less than 5 years afterwards, owing to the falling off in the number of students, Dr. Hunter resigned his lectureship; this was on the 3rd of July, 1846, near the end therefore of the Session 1845—6, not the middle of the Session 1846—7 as stated by Mr. Cowell.

Dr. Hunter was succeeded in the lectureship of Anatomy and Physiology by his coadjutor, Mr. Erichsen, and in his lectures on Practical Anatomy, first by Mr. Pennell, and then by Mr. Holt.

The Session of 1846—7 opened as usual on the 1st of October, but it was the last Session of the School of 1841, for Dr. Hunter had taken away with him a great portion of his Anatomical Museum, and the Council of the College of Surgeons, after due inspection of what was left, considering it insufficient for the adequate illustration of the Anatomical Lectures, withdrew their recognition, and the students were transferred for this branch of their teaching to King's College.

Coincident with these events, on the 19th of October, 1846, the Westminster Improvement Commissioners, requiring the site on which the School premises were built, offered to purchase them for a sum of £3,150 exclusive of fixtures. For a School

which did not pay its expenses and was heavily in debt, this offer was too tempting to be refused; accordingly, on the 27th of the same month it was accepted, and what at first seemed a misfortune, really turned out to be fortunate, for with the money thus obtained the mortgage and all other outstanding liabilities were discharged. The Medical Officers and Lecturers were repaid their contributions, and the balance was invested in the purchase of £584 8*s.* 9*d.* 3 per cent. consols. Thus the School founded in 1841 practically came to an end, and an interval of 3 years elapsed between its collapse and the permanent establishment of the present School in 1849. Whether anything worthy to be called a School of Medicine, without Anatomy, was carried on in Dean Street in the interval between the acceptance of the offer of the Commissioners and the completion of the purchase, does not appear; the only information I have been able to obtain from the School and Hospital Books is, that on February 17th, 1848, a Committee of Governors of the Hospital, consisting of the Treasurer, Mr. Pleydell Bouverie, and four other Lay Governors, the Senior Physician, Dr. Hamilton Roe, and the Senior Surgeon, Mr. Benjamin Phillips, were appointed to consider the subject of re-establishing a School of Medicine in connection with the Hospital, and having reported in its favour, they set about searching for a suitable locality for the erection of School buildings. This was eventually found in some premises in Princes Street at the back of the Hospital, now a part of the site of the Government Stationery Office, which were at a cost of some £700 converted into a Medical School. The next step was to get together a staff of Lecturers; but it was not till the 29th of June, 1849, that the following gentlemen were unanimously recommended for appointment for one year:—

Dr. Hamilton Roe	... Medicine.
Mr. Herman Lewis	... Chemistry.
Dr. Basham	... Materia Medica.
Drs. F. Bird and Merriman ...	... Midwifery.
Messrs. C. Brooke and Hillman	... Physiology.
Mr. C. Holthouse	... Anatomy.
Mr. Benjamin Phillips... ...	... Surgery.
Mr. Clendon	... Dentistry.
Dr. Radcliffe	... Botany.

Drs. Fincham, Greenhalgh, and Tanner for the remaining chairs, one of the unsuccessful candidates for the chair of Anatomy being appointed Demonstrator, with a salary of 20 guineas for the session.

At this Meeting of June 29th, the Medical Officers of the Hospital agreed to devote one-third of the fees they might receive for Hospital practice, to a fund for the support of the School for the ensuing year; at the same time each of the Lecturers was called upon to contribute to this fund an amount equivalent to the value of their respective chairs, and the Anatomical, and the Physiological being the two highest, were each called upon for £25, which was afterwards raised to £35.

Passing now to the events which took place subsequently. The School was opened on the 1st of October, 1849, with an Introductory Lecture by the Senior Physician, Dr. Hamilton Roe, and considering its imperfect equipment, Dr. Hunter having removed most of his Museum, the outlook was far from bright, nevertheless by a bait offered to intending students that by entering to the Hospital practice only, all the lectures could be attended gratuitously, 30 students were induced to enter.

This was cheering enough for the Medical Officers of the Hospital, who had only to contribute a third of the fees they received from the pupils towards the expenses of the School; but was hard upon the Lecturers not on the Hospital Staff, who, in addition to the contributions they had already made to the School fund, were now called upon to give their lectures gratuitously; to myself especially, who was the largest contributor, the prospect of having to lecture daily for the next 6 months without any fee was by no means encouraging.

But our troubles were only beginning, for the School had been opened little more than a month, when a letter, dated November 10th, 1849, was received from the College of Surgeons informing the School Committee that the College refused to recognize our School "owing to the deficiencies in the Museum," a printed list of which deficiencies was furnished. Thus this second School might have shared the fate of the first, had not the late Mr. Lane kindly offered to take over our pupils *pro tem.*, while I came forward and volunteered to supply all the preparations required by the College before the end of the year, provided a sum of £30 were granted me for the purpose. This

sum was at once voted, and I was appointed Curator of the Museum.

Before the end of December, 1849, every one of the deficiencies had been made good, and Messrs. Arnold and Cæsar Hawkins having been deputed by the Council of the College to visit and report on the Museum, after a searching examination, expressed themselves satisfied. The recognition of the School was granted and our students resumed their attendance on the anatomical lectures at the Westminster Hospital School for the remainder of the Session.

The only facts that need be recorded in the Session 1850—51 are, 1st, the resignation of Mr. Burford Norman, who had acted as Demonstrator of Anatomy in the previous Session, and the appointment of Mr. Henry Power as his successor on October 25th, 1851; and 2nd, the falling off in the number of entries to the School. Considering the crisis we had passed through, together with the fact that henceforth no more gratuitous lectures were to be given, the falling off in the number of entries is not to be wondered at; and as misfortunes are said never to come singly, "it happened that after only 2 years' occupation of our new premises, 12 months' notice was given to terminate the lease, the ground being required for the Stationery Office. In the following year (1852), therefore, School buildings were constructed on the ground at the back of the Hospital, at a cost of £918 10*s*., the amount being defrayed by the Hospital. For this sum the dissecting room and chemistry laboratory were built, the present operation theatre was constructed in place of the old one, which was converted into a lecture theatre, and the out-patients' rooms were rearranged."

In spite, however, of all that had been done by the Governors the School did not prosper, and in the Session 1853—4 there were only five full entries.

I had now been lecturing for 5 years without having received any remuneration for my services, or return of the money I had advanced to the School fund in 1849, and seeing no prospect of improvement, under the then management, I sent in my resignation of the chair of Anatomy. This brought matters to a head; a meeting of all the Lecturers was called, and I was told that had my intention to resign been known, I should not have been elected Assistant Surgeon to the Hospital in April, 1853.

In defence I contended that it was useless and hopeless to continue lecturing, or to look for any improvement in the finances, till the School premises had been made more presentable and attractive to students, and brought up nearer to the level of the other London Medical Schools, and I expressed my conviction that till this was done larger entries could not be expected.

The reasonableness of this contention was at once assented to, and it was then and there unanimously decided to appoint me sole manager of the School with *carte blanche* to do whatever I considered necessary, and to draw up the prospectus for the next Session.

Of course the contemplated alterations and additions to the School premises could not be made without the sanction of the Hospital authorities and a considerable sum of money; the former was given, but the latter was refused. I was empowered however to make arrangements with two of the students to receive a composition fee of 50 guineas from each "for the purpose of obtaining a fund to cover the expenses."

It is unnecessary to go into all the details of the additions and improvements effected; the result was, that in the opening of the Session 1854—5 there were fifteen full entries, *i.e.*, three times the number of the last, and larger than any since the opening of the School in 1849. In the following Session 1855—6 the entries were seventeen, and from that time the resuscitated School has been carried on without a break, till 30 years afterwards the requirements of teaching had so far outgrown the space at its disposal as to necessitate its removal to the present large and commodious premises in Caxton Street, for a full account of which the reader is referred to the excellent description of Mr. Cowell in the 1st vol. of the Westminster Hospital Reports.

From the foregoing brief narrative it will be seen that the recognition of the Anatomical Lectures in the School by the Royal College of Surgeons took place in 1849; Mr. Power was not connected with the School until October 25th, 1851, and Mr. C. Heath not till several years after this date.

LIFE IN THE INDIAN MEDICAL SERVICE.

NARRATED BY

N. C. MACNAMARA, Fel. R.C.S.E., and of Ireland, &c., &c.,
Senior Vice-President of the Royal College of Surgeons, England,

To the Members of the Guthrie Society at the Westminster Hospital, on Thursday, 21st January, 1897.

W. G. SPENCER, M.S., F.R.C.S., *President*, in the Chair.

THE PRESIDENT: Gentlemen, it is our good fortune to have at this meeting a lecture on a subject which really is of great importance to us as medical men. Many of us, members of this Society, are looking forward to a future and prosperous career. There is at the present moment, I suppose, no place less overdone by medical men than India; and the Indian Medical Service probably, of all the Government Services, offers us one of the best openings which a man can, at present, expect to have, and to have such experience as Mr. Macnamara can bring to bear upon the point must be of great interest and usefulness to any of us who propose to join that service, or to seek our medical career within the provinces of the Indian Government.

Mr. MACNAMARA: Mr. President and Gentlemen, as I am not going to give a lecture or even to read a paper, but to narrate some of my experience in India, I hope I may be allowed to remain seated.*

My object is to answer a letter which was sent me on the 5th September by your Secretary. In that letter he observes, "We should feel greatly obliged to you if you would favour us with a short sketch of the Indian Medical Service." A sketch of the Indian Medical Service is rather an extensive order, but I understood what your Secretary meant, and it seemed to me that I could best fulfil your wishes by giving you some account of my career in India.

* Mr. Macnamara's address was taken down by a shorthand writer, and so preserved for publication in the Westminster Hospital Reports.

I arrived in Calcutta at the end of 1854. On the 14th October of that year I was 21 years of age, and I went up immediately after that date to the College of Surgeons, which, in those days, was passed by a single examination, which lasted for an hour and a half; if we had then satisfied the Examiners in Anatomy, Physiology, and Surgery we were passed as qualified medical men. I thus became qualified, and within a month (for those were, fortunately, not days of competitive examination) I received a commission to proceed to India as an Assistant Surgeon in the Hon. East India Company's Medical Service.

I landed in Calcutta before Christmas of 1854, and in the course of a few days received orders to take charge of the head-quarters of the First Bengal Fusileers, one of the East India Company's European Regiments. They had just arrived from active service in Burmah, and were encamped on the maidan in Calcutta. I took charge at once, and in the course of a few days we started on our journey up the river Ganges to Dinapore, a large military station near the city of Patna. There were no railways in India in those days, so we were drawn up the river by steamers, to which were attached large flats or barges, upon which the soldiers of the regiment lived. We could only travel by day, as the river was an extremely dangerous one on account of the number of its sand banks. At night, therefore, we hauled up, and the flats came alongside the steamers which carried the officers.

I passed the greater part of the day on board the flats trying to learn something of the men of whom I had been placed in charge and who, taking them as a whole, were enlisted for life. A great number of them were Irishmen, and very genial fellows. I found by dispersing tobacco pretty freely among the men that I soon won the soft side of their hearts, and what with employing myself in writing their letters (many of them had not written home for 10 or even 15 years), I got on very well and soon began to know the men. I heard some remarkable stories, many of which I took down at the time, but tales of this description have been so admirably given by Mr. Rudyard Kipling, that I will not attempt either to imitate his style, or to give you any idea of life among European soldiers in India, though I may say from my own experience Kipling's descriptions are true to

life. In due time we arrived at Dinapore, the Military Station to which we were bound. We had not been many weeks in that station before, there was a frightful outbreak of cholera. The men of the Bengal Fusileers who had come up the river with us were as fine a set of fellows as you could meet with anywhere; and in the course of 10 or 15 days many of these men, mostly young soldiers, were brought into hospital suffering from cholera, and not less than one-half of them died within a very short time. The hospital was a long building with corridors on either side, a stone floor, and cots arranged down its centre; it contained no other furniture of any description or kind. There were no nurses, and only a few native coolies to attend to these poor soldiers. The Europeans could not speak Hindustanee, and the natives could not understand English; the whole place was therefore practically left to my charge; and a terrible responsibility it was for a young fellow in his twenty-first year of age. I lived in the hospital, sometimes sleeping on a couch from which a man's body had been carried a few hours before. All this made a deep impression on my mind which I have never forgotten. So much so, that, from that time onwards, during my service of nineteen years in India, much of my time was devoted to this subject. The European barracks were situated close to the officers' quarters. There were three or four native regiments living at a short distance from our barracks, and European artillery about a mile and a half from the 1st Bengal Fusileers. Not one of the native sepoys, nor of the artillery, were affected by cholera. The disease was confined to the men of the Bengal Fusileers. We very soon found that the disease appeared to be communicable; for European orderlies were at first allowed to take charge of the sick in hospital, but so many of these men were attacked with cholera that it was impossible to permit more of them to come into the hospital. Nevertheless the native attendants did not suffer. Before leaving England, Dr. Snow had published his famous Broad Street cases of cholera, but the Royal College of Physicians had, in reviewing the evidence regarding these cases, come to the conclusion that drinking water could not possibly be the medium by which the virus of cholera was conveyed from one place to another, or contain the poison of cholera. In 1854, however, I was convinced that the disease was contracted by

those persons who drank water or consumed food which in some way or other contained the germs of the disease. It was impossible otherwise to account for this outbreak of cholera among the unfortunate soldiers of the 1st Bengal Fusileers at Dinapore.

During my time with the Bengal Fusileers I was on intimate terms with the Colonel of the regiment and with all the other officers. I lived at mess and no thought ever entered my head as to the subject of rank. I may here remark that during my service in India, from the Governor-General downwards, I was always treated as a friend; much of the humbug and vulgarity of English people is lost in India; there if a man does his duty and behaves as a gentleman he has free access to society wherever he may be serving.

In the hot weather of 1854, I was appointed, in addition to my other duties, to the staff of the division at Dinapore. Then the Senthall rebellion broke out. The Senthalls are an aboriginal race living on the chain of hills lying between Calcutta and Dinapore, and stretching from the Ganges down into Central India. These people had risen against the Mahajans, or money-lenders of Bengal, who had settled among them and were apparently oppressing them to a very great extent. The Senthallies rose against these Bengalies and murdered many of them, and even threatened to march upon Calcutta. They were very numerous, but were badly armed, brave, but little more than savages. The head-quarters of the Dinapore division was under the command of General Loyd, and I was his medical officer, and was also in charge of the 40th Regiment Native Infantry. We started in order to suppress this rebellion with several regiments of native infantry, and others were to meet us at a place called Bhagulpoor, together with artillery and cavalry. When I got to Bhagulpoor with General Loyd, cholera had already broken out among the European artillery who had been sent down the Ganges as a part of our force. It seemed to me so clear that there was something localised in cholera that I urged General Loyd as speedily as possible to leave the station with the force, and so get away from the cholera focus if possible. This he did, but, unfortunately, there was no one to take charge of the cholera patients. So it was settled I was to be left in charge, not only as medical officer of these men, but as a military

officer, because the military had to go on with the general. No sooner had the officers turned their backs than these men took to drinking to an alarming extent. I had little or no power over them, being merely medical officer I could not punish them. Their hospital became a hell on earth, what with drink and cholera, and I was very glad in about a fortnight on the arrival of an artillery officer to be relieved of my troublesome charge. Then the question was how to reach the general, who had advanced some ten days' journey into the Senthall country. The line of march was swarming with Senthallies. There was no road. Nevertheless it was necessary for me to join head-quarters as quickly as possible. At this juncture, I happened to meet with Mr. Onrait, an indigo planter, and I told him of my difficulty. He said he had a horse that would carry me into camp. There were some arabs passing through the station not long before and he had bought some of them; so I went to his stable and found an arab which seemed to me just what I wanted. Mr. Onrait asked £100 for this animal, and I gave him an I.O.U. for that amount and took the horse. I started next morning on my arab and rode him seventy miles straight away, and arrived in the afternoon, to the surprise of most of the officers, in the general's camp. The first person I met there was the Hon. Ashley Eden, who was then a young civilian in charge of the general's camp. He offered to take the horse off my hands, and to send Mr. Onrait a cheque for £100—an offer I was only too glad to accept. We were out in the rains during the Senthall rebellion. It was disagreeable work, a kind of guerrilla warfare that was carried on, and we were therefore confined to tents, for we could not move outside the camp without the chance of being attacked by our enemies, and during the rains a life in tents is a miserable sort of existence. We lived in a swamp, moving about without shoes or stockings, liable to be attacked unless careful by leeches. But when the campaign was coming to an end we got very sick of it, and one morning I proposed to the officer who was living in the same tent with me, Lieutenant Burne, that as there was game to be had in the hills not very far off we might get some shooting by way of change. The colonel commanding the 40th Regiment, however, said that this was contrary to orders, and that no one could leave the camp. "But," he said, "if you like to take a

company of the regiment with you I have no objection to your going." So the grenadier company of the 40th Regiment was ordered out and we started on our shooting expedition. We had not gone more than a mile and a half from the camp, when walking through the scrub, all at once the place seemed alive with the Senthallies. They yelled in a diabolical manner, firing at us, and throwing their spears and lances with precision at our men. Lieutenant Burne drew up his sepoys in a hollow square, I was placed at one corner, and he at the other, when down came the enemy with a rush, and a sharp and desperate attack they made on us. They charged us several times. The sepoys behaved well, there was not a moment's hesitation or giving way; several of them were wounded and my services were therefore soon required. The Senthallies did not break into the square; they attacked at first from two directions, but we then saw them closing round to the rear. This went on for about ten minutes, and then down came a regiment of cavalry and artillery to our relief. The general had heard the firing, and judging there was something wrong sent out a force to help us, and if it had not come quickly it seemed to me few of our shooting party would have escaped.

When the Senthall rebellion was coming to a close, the Lieutenant-Governor of Bengal, Mr. Frederick Halliday (now Sir Frederick Halliday, who is living in London at the present time, and is a friend of my colleague, Mr. Bond), came upon the scene with his vice-regal establishment, and as he had no medical man with him I was attached to his camp and started with him on a tour through the Senthall country, and a most enjoyable march we had, the Lieutenant-Governor and Mrs. Halliday showing me every possible kindness. After this expedition was over, I had to return to Dinapore and resume charge of the 40th Infantry together with the general's staff. I remained at Dinapore for a year and was then ordered to Calcutta to fill the post of medical officer to Fort William. This was rather an important post in those days; there were a large number of Europeans in the fort, and a good deal to do. Early in the following year (1857), we heard the first muttering of the Mutiny, which commenced among the sepoys at Barrackpore, a station situated about fifteen miles from Calcutta. The beginning of it there was an attack by one of the sepoys upon

his officers. The mutiny spread over the whole of Bengal, and as a number of the sepoys belonged to Oude, it seemed probable that there was some collusion between the lately deposed King of Oude and his prime minister, Ali Nukie Khan (one of the most astute, and ablest men that India has ever produced), and the outbreak of the sepoys. Lord Canning therefore sent orders to the fort to march a European regiment to Garden Reach and seize the King of Oude and his Prime Minister and bring them prisoners into the fort. The Governor-General placed me in charge of these people, and I had to communicate directly with him as to everything that passed between us. Ali Nukie Khan gave me much valuable information, which I was enabled to impart to Lord Canning, and which, I have reason to think, influenced him to some extent in his policy with regard to the Mutiny. I was able to show him, and I still believe, that the Mutiny was a revolt of the sepoys and not of the civil population of the country, and so Lord Canning ordered clemency to be shown to every native who could not be proved to have taken part in the rebellion. None of you probably remember that time, but the Governor-General got the nickname of "Clemency Canning," and to his honour he insisted on justice and mercy being shown to the civil population of the country. With all this work on hand, and constant attendance on the needs of troops arriving in the fort, and of people from the upper provinces of India (many of them the wives and children of officers who had been killed in the Mutiny), my time was more than occupied. But I never lost my interest in my professional work, and during my service in Fort William I published my first article on "Fatty Degeneration of the Liver." I found that this condition was common among our European soldiers; and it appeared to me to be caused by the quantity of alcohol they consumed and the sedentary life the men led. In addition to this article I made contributions to various medical journals.

Early in 1858, Mr. Halliday sent for me, and told me the civil station of Tirhoot was vacant, and if I liked to take this appointment I might go there. This was one of the most valuable appointments in Bengal, and one which was coveted by many men. I was still quite a junior in the service, having only been four years in India, and I was, of course, only too

glad to accept Mr. Halliday's offer. I left the fort and travelled up the Grand Trunk Road by horsedak as far as Patna and so managed to reach my station, Mozufferpore. Tirhoot is a very fertile district situated between the River Ganges and Nepal. The district is covered with planters, most of them Europeans, who are engaged in the work of growing and making indigo. There was also a large Government stud in the district, with an extensive establishment of officers of various grades and their families. There were also two out-stations besides Mozufferpore in which I resided, and in addition, a large jail and dispensary. I was in medical charge of the whole of these establishments, and a heavy charge it was. Besides that, I was registrar of deeds, which was a lucrative appointment and gave me very little anxiety or work.

When first I arrived in Tirhoot, the Mutiny was still going on. The station was occupied by the European inhabitants of the district, and was, in fact, a fortified camp, and we had no small anxiety as to the movements of the rebels, large bodies of whom passed through the district. We were only separated from Oude by the River Gogari, and strict watch had to be maintained to prevent mutineers passing to our side of the stream. So much, however, has been written regarding the Mutiny, that I do not think it is necessary to dilate upon that part of my career.

With regard to the station, I will give you an account of a day's work. For instance, I was always up at whatever hour the sun rose, and started at daylight to visit the jail. I was responsible to the magistrate for the sanitary condition of the jail, and for the health of the prisoners. Having finished my jail work I went on to the dispensary, where there were a large number of out-patients to be treated, and some twenty or thirty in-patients. I and my native assistant had a number of stone cases to treat; as a rule we removed the stone by lateral lithotomy. The surgical practice, in fact, was extensive, and more than I could well attend to. Having finished my work at the dispensary, I had to visit patients residing in the station. Then I returned home to a bath, and breakfast. After this I often had a journey to either one of the out-stations, some thirty or forty miles away, to see a sick person, or else a call to visit one of the indigo factories of the district. The person who

wanted to see me sent in word by a runner, sometimes on foot or on horseback, to inform me that he had sent out horses on the road for my journey. As the messenger passed through the various factories on his road to the station, he had given information to the planters, and they ordered out horses, so that by the time the messenger had arrived at my house, horses were laid every five miles along the road he had come. I started in my buggy, a gig with a hood, and drove five miles, and then met a fresh horse, and so on until the end of the journey. I had frequent visits of this kind to make, which occupied much of my time; I usually returned home in the evening, but sometimes not till the next day. Occasionally I had to travel by night, either by horsedak, such as I have described, or by polkie; that is in a large box, carried on men's shoulders, in which you can lay down and sleep. This box had two poles projecting at either end, and was carried on the shoulders of four men. There were generally relays of these bearers; mostly four sets of men went with you on a long journey, who relieved one another every two miles. On one occasion having been called out to a sub-station, some sixty miles from Mozufferpore, I started in the afternoon, with sixteen bearers. By the time I arrived next morning at my destination, the unfortunate individual who sent for me had succumbed to the disease from which he was suffering. The question was how could I best get home. I might have procured another set of bearers to carry me back to my station, but the men, however, who had brought me thus far, said they were willing to start home again if I waited until the afternoon; and these sixteen men then started off and carried me back to Mozufferpore, so that with my weight on their shoulders, they went no less than 120 miles in the course of 36 hours; and yet these men lived entirely upon milk and rice. I mention this as an instance of the extraordinary endurance of these bearers, living as they do on food such as I have mentioned.

During the time I was at Tirhoot I had some curious adventures of one kind and another. I was going round the jail one morning, and as I passed through the workshops all appeared to be perfectly quiet, when, without any warning, there was a tremendous row with a cry of "Dean-dean!" This cry of "Kill him!" was intended for myself, the only European

present. I always went round the jail with a couple of native policemen, who carried their muskets, and with the native head of the jail. There was nothing to do on this sudden outburst of the convicts but to run as fast as we could, and we fled to an angle in the jail-wall with a large buttress projecting from it, and thus got into a corner well protected. The prisoners came down on us yelling, but we kept them back. My guards were ordered to fire over their heads, as we wished, if possible, both to save bloodshed, and to sound the alarm for help; and the noise of the firing had the desired effect, for, after a short time, we were relieved by the jail-guard. Lives have been lost in jail outbreaks of this kind. The prisoners seem almost to go mad, and Mahomedans believe if they slay a Christian they are certain to gain Paradise; and so, after such a deed, it matters not what happens to them here.

Another adventure which occurred to me while at Mozufferpore is not a little remarkable. One day, when at the dispensary in the morning I was attending to the patients, two men came there with their backs frightfully lacerated, and deep gashes over their buttocks. They said that in the early morning they had gone out near a patch of grass, and that a tiger had rushed out of this grass and wounded them terribly, and that the animal had seized one of their companions, and carried him away into the grass jungle. Their friends had at once brought them into the station to see me at the dispensary. It seemed almost impossible that a man-eating tiger could be wandering about between Mozufferpore and Patna; one might as well expect to find a tiger at large in the county of Middlesex as in Tirhoot, a highly cultivated district, and where an animal of this kind had not been heard of for generations. However, there were the wounded men, and at this moment Mr. Charles Metcalfe, the Assistant Magistrate of the district, happened to ride past the dispensary, and I called him in. There was no question as to the story of the men, and Mr. Metcalfe thought that the best thing we could do was to order our horses and go to the village mentioned by the wounded men, and see what was the matter; so we got our rifles and off we rode. We soon arrived at the village, which was about five miles from the station, and there we found the population in great excitement. They knelt down praying to

us, saying that we, their protectors, must deliver them from this fearful beast, which had already carried off one of their number to devour him. We got off our horses and found a very large open space behind the village, in the centre of which space there was a patch of what is called dhall, a pulse which grows on a stalk and runs up some six or seven feet high. The villagers stated that the tiger was in this dhall patch. But the question was how were we to get him out of it, so as to have a fair chance of shooting him. It was quite certain if we approached the dhall patch that in all probability, if the tiger was a man-eater, one or other of us would be seized by the beast. We therefore from a distance fired our rifles into the dhall, but this had no effect; so we got some fireworks and drums and tried to drive the tiger out of his hiding-place; but nothing came of this: there was not a sound of any description or movement in the patch of dhall, and we began to doubt the existence of the tiger. There was a mango tree half way between the village and the dhall patch, and my friend Mr. Metcalfe thought it prudent to get up into this tree. He said he was the father of a family, and was not disposed to expose his life unnecessarily to the tender mercies of a tiger. But I became tired of this proceeding, and as it was getting late determined to go and see if there was a tiger in the dhall. Mr. Metcalfe thought the best course for me to follow was, if the tiger came out at me to run in his direction, and that he would do the best he could to shoot the animal from his seat in the mango tree. I then went cautiously up to the patch of dhall, and there I saw the tiger sitting directly before me with his head well up, gazing full at me and his paws stretched out in front of him, and resting upon the body of the dead, and half-eaten man; he had evidently had his fill, and was not disposed to be disturbed. I am not a very good shot, so I knelt down on one knee, and being doubtful of killing the animal, even if I hit him in the head, and knowing that if I fired and missed him I should be done for in spite of Mr. Metcalfe, I thought it better to attempt to shoot the tiger through the heart. He was directly in front of me, and not more than twenty yards distant from where I knelt, so I thought I could not miss his chest. I took a steady aim at him and fired, and then ran for my life. There was not, however, a sound, not even a howl, and I came back to the tree on

which my friend was seated to consult him as to what was next to be done. It was thought best not to go up to the edge of the dhall, because it was possible if the tiger had been wounded he would spring upon us. We waited, therefore, until we saw a small boy coming towards us on a young elephant, with a lot of boughs on her back. They had been out to gather food for the day, and the elephant was returning with her evening meal. I turned the boy off the elephant, together with her load, and then got on the neck of the beast with my legs hanging down behind her ears, and Mr. Metcalfe mounted behind me on the pad covering the elephant's back, and off we went. The moment we got near the edge of the dhall patch the little elephant rushed straight into the dhall, and in a moment I was thrown over her head upon the tiger. Fortunately the animal was dead, and the elephant was kneeling on his body. She had rushed into the dhall patch and knelt upon the dead tiger, and this so suddenly that she pitched me on to the body of the beast. My shot had been a fortunate one, and the ball had gone through the tiger's heart and out at his spine. I show you his skin, which is well preserved, and also his skull, of which I am proud.

Every cold season we used to form a shooting party in the Nepal Terai, or forests; the party consisted of four or five planters, and the collector of the district, Mr. B. Lane. One year we had as many as 70 elephants with us to beat the jungles for game. It was a glorious time going through these magnificent primæval forests with their beautiful underlying grass jungle, and the splendid Himalayas stretching away beyond us for hundreds of miles. The Right Hon. Sir G. Trevelyan, then fresh from Cambridge, was with us at one of these shooting parties, and he has written an admirable description of our sport and pleasure on this occasion, which I recommend you to read. We shot tigers, bears, leopards, deer, and game of every description. But of all the sport I had in India, pig-sticking was far and away the best. In those days when I could ride, to have a good horse under me, and an old boar going well ahead, was the finest sport I can imagine. The boar was almost sure to turn upon you when at close quarters, and then unless you had a good eye and a firm hand you were certain to have your horse damaged, and yourself too,

if you did not take care what you were about. In the cold season we also had a very delightful gathering in a magnificent grove of mango trees at a place called Sonepore, on the banks of the Ganges. There the civilians of the surrounding districts, the planters, and the military from Dinapore, met in a large camp. We had a fine racecourse and ball-room, and often a splendid meeting with perpetual feasting, enjoying ourselves to our hearts' content for ten days or so.

I wish you, however, to understand that my life was by no means all pleasure; far from it. One had heavy responsibilities and hard work in Tirhoot, but I am trying to give you the bright as well as the heavy side of existence in India, and that at a time when one could enjoy life. I was making upwards of £3,000 a year, and was not more than nine and twenty years of age. While in Tirhoot I wrote a pamphlet on leprosy, of which disease I saw a good deal. I also published papers upon the extraction of cataract, an operation then seldom performed in India; also on filaria in the eye of the horse and in man, and other papers, which appeared in various medical journals; one of them being on the biniodide treatment of goitre, of which we saw a vast number of cases, the tumours being often of great size. I mention this because I know of no better way of learning than by writing. It is only when you come to put your knowledge on paper that you find out how little you know of the subject on which you are engaged. This life continued until the year 1865, when I was asked to take the appointment of Surgeon to the Ophthalmic Hospital in Calcutta. The Government pay was £1,200 a year, and I had an opportunity of making a large private practice. I left Tirhoot with many pangs. I had lived an outdoor, healthy life there, and one in which I had enjoyed myself vastly, and this was to be exchanged for Calcutta, and a city life with no end of work and anxiety; but it was promotion, if not in happiness, in position: but I soon discovered that I was little more than a medical machine. As a rule I started at sunrise and went to the hospital, and remained there till about 8 o'clock, and then I usually had calls to make in the native part of the town, for I laid myself open very much for work of this kind, and to consultations with native medical practitioners in various parts of Calcutta. I generally got home about half-past ten, often very tired, but with a

pocket-full of rupees. Then I had my bath and breakfast, and went out in my carriage to see European patients. This went on until three or four o'clock in the afternoon, when I got home, and then there were often a number of other messages to attend to. The day's work was seldom finished until after it was dark, and then to dinner, and too often one was called up at night. That was the kind of work which went on day after day, excepting when I was called away to some distant part of the country, to attend a native prince or rajah. These were generally cases demanding an operation.

One of these journeys was far away to the other side of India, to attend the Maharajah of Jeypore, who said to me when I was leaving him after extracting a cataract from his eyes, that he could now see, but was a stone when I came to him. He presented me with a fee of £2,000, the largest fee I ever received. But you must remember that to earn it I had to travel half-way across India on a journey which took me three weeks, so that although it was a good fee, it took a great deal out of one to earn it. Among the natives I made a number of valuable friends, and I always found them generous and truly grateful patients. The Hindoo family life and system contains a vast deal that is attractive, and much to admire; but this, and a great deal that interested me in connection with the natives of India, is beyond the scope of an address of this kind. Of all the work I did in Calcutta, however, the most satisfactory was the building and endowing of a large native hospital, which now contains 250 beds, and is extremely well-managed, and a most useful institution in every way. There is rather a good story connected with the building of this hospital. I had set my heart upon having it erected upon the banks of the Hoogly River, which runs through Calcutta, but then the question arose as to how I was to get a site for my building. Land is enormously expensive in this part of Calcutta, and I could not quite see how I was to get sufficient space for my hospital on the banks of the river. There was no land in fact to be had; but there was an old Hindoo ghaut, that is, a place where dying natives are taken to be within sight of the Hoogly, the waters of which they had to drink, and in which their bodies were to be placed before they died in order that their souls might pass away through the river to eternity. The Hoogly had receded

from this ghaut, so that it had not been used for a long time, and it had become surrounded with a large garden. I cast longing eyes upon this spot—it was just the place for my hospital—but how was I to get possession of it? When I came to enquire into the matter, I found the ghaut hardly belonged to the Government, and at any rate they could not touch it, because they dare not appropriate a Hindoo building of this description. I found none of the natives had got any power to occupy this land, and then the thought struck me, if it belongs to no one, why should I not take possession of it for my hospital? So I determined on a plan of action. I went to a large firm of European builders in Calcutta, and told them I was going to pull down this ghaut, and if they would help me I might put a good thing in their way. They agreed if I promised to take the responsibility of the business on my own shoulders. So it was arranged that a number of native workmen were to be at the ghaut at sunrise on a specified day, and I was to order them what to do. I went to the place at the time mentioned, and there were the natives. I directed them to pull down the ghaut, and they set to work. Everything went on happily. I remained with the workmen the whole of the day; people passing by evidently thought it was all right, and that somebody to whom the place belonged had given the order to remove the building, which was levelled to the ground, and I then railed in the premises. When the Government heard of my proceeding, there was much talking and writing, but I marked out the foundations of my building, and the Mayo Native Hospital was opened by Lord Northbrook (who was then Viceroy of India) on the 5th of February, 1873, and as I said before, it is now a most flourishing institution and doing admirable work. I could not remain in Calcutta to see the work quite completed, for my time in India was coming to an end. I had been there for 19 years without a day's leave; in fact, I never had time to take leave. In addition to my everyday practice during my residence in Calcutta, I wrote my work on the subject of cholera, which has since gone through three editions. I also published a work on the diseases of the eye, which has gone through five editions, and been translated into Bengalie and into the Japanese languages. I was editor of the *Indian Medical Gazette*, and wrote numerous articles on tetanus and other subjects.

I began my story this evening with cholera at Dinapore, and my days were nearly ended by this disease. I had been trying to inoculate certain animals with cholera matter and afterwards went home to breakfast, but I could not get rid of the choleraic odour, it seemed to have fixed itself in my nostrils. At 1 o'clock the same day I was seized with cholera, and in a few hours afterwards was most dangerously ill. However, I pulled through, but found that my health was such as to prevent my carrying on work as I should have wished. I had lost interest in it, and as my three children were growing up, I thought it better therefore to come home. Having arrived in England, I was offered by my late colleagues, Mr. G. Cowell, Mr. Bond, and others, an appointment at the Westminster Hospital; an honour, so far as I know, with the exception of Guthrie, never conferred on an army surgeon, and in consequence I gave up the Indian Medical Service.

The question probably you will ask me now is, what is my opinion as to a career in India at present? I have tried to give you my own experience of a life in Bengal; I can only say the old East Indian Medical Service is not what it was; I do not suppose any of you, if you went out to-day, would have the appointments I had, but still it is a very fine Service, and my conviction is that England is very much over-crowded, and that the prospects of only a few of you can be satisfactory in this country, unless you have fathers or uncles or somebody who can introduce you to a good practice; and even then, from a social point of view, the life of a general practitioner in England is hardly a happy one. If you wish for practice, and to do good work in your profession, I cannot help thinking India is as fine a field as you could have. I am convinced there is no field in the world where a better opening can be given a man if he will really work. You must not go out there and expect appointments to fall into your mouths; but if you go to India and make up your mind as to what lines you wish to follow, and determine to gain your end, you will succeed; you may take to the political line, as one of our students has done recently, Sir George Robertson; but take what line you please, only stick to it, and work for it, and you are almost certain to get what you have set your heart on. I do not know any place in the world where a man who makes up his mind—and I do not

care whether he has interest or not—to pursue a certain line and will steadily follow it out, is more likely to succeed than in India. People there find out what you are worth. They soon discover whether you have the capacity and the desire to get on, and if you have they will help you. I can only say in conclusion that if any of you choose the India Medical Service for a career, I sincerely hope you may enjoy the same amount of health, happiness, and of success which attended me during my 19 years' residence in Bengal.

The PRESIDENT: Gentlemen, one could only anticipate when one heard that Mr. Macnamara had consented to give us an account of his personal recollections that they would be interesting, and I am sure you will all agree that to-night has been one of the most pleasurable evenings the Society has ever had, for we have heard a number of most interesting and original observations from Mr. Macnamara, who has had a most successful career in India. He has given us not only the medical side of his career, but one that has included also sport. That first adventure he had, when he got out with a company of the regiment and was walking in what I suppose would be like furze in England, where they would be on the look-out for rabbits, and then for the rabbits to turn suddenly into enemies and rush at you and try to knock you over instead of you knocking them over, this must have been a serious surprise. I think Mr. Macnamara's tiger story, which we have all heard first-hand, is one of the best that possibly could be told. It is not every one that could have knelt down in front of a man-eater and have hit him straight in the heart. I am sure most of us here would have missed him and have been consumed in a moment. That is an excellent story. I am very interested in sport, and have read a lot about shooting and shooting expeditions in India and Africa, and I know of no better tiger story than Mr. Macnamara has told us to-night. I think it shows his appreciation of true sport. With regard to the boar, he is one of the best sporting animals in the world, and I only wish we had an opportunity of hunting him in England. He is one to give good sport whether you hunt him on horseback or in the way which formerly was practised in this country, but cannot now, with dogs on foot running in when the boar was at bay and sticking him with a short sword

or spit. The boar is always game. It never utters a sound, and it dies after a thorough good struggle in which a number of very good dogs may be lost, but the hunter may run the risk of getting ugly cuts himself. Mr. Macnamara has not touched much upon his medical experience except in a general way, but there are two most important portions of his work in India, which, though he has scarcely noted them, must be remembered, and those are his views with regard to cholera and leprosy. I will not say anything about other portions of his work, but I may just refer to those two. You must remember he was in opposition to the rulers of his time, now they have changed their minds very much. They would not then admit what we should call now "isolation" with regard to cholera and "segregation" with regard to leprosy. From clinical observations Mr. Macnamara took the lead, and was always in opposition to the rulers of India with regard to those two points, and his work on cholera and leprosy lays down what would now be summed up under the terms isolation as regards cholera and segregation as regards leprosy. These views were at that time bitterly opposed, not only in India, but also by the College of Physicians in this country. When cholera came to England, for instance, many of the physicians of the hospitals put their cholera patients in the wards with other patients, until there was such a public outcry they had to have separate wards. Mr. Macnamara from his earliest experience with regard to cholera has been a strong supporter of the isolation of cholera and the treatment which follows from these views with regard to the cholera germ. His views were confirmed by Dr. Koch when he went to India, and Mr. Macnamara's work is referred to in appreciative terms by Dr. Koch in his report on the occasion on which he was sent to India. The same remark applies to leprosy, for at the time when Mr. Macnamara was living in India, Lord Lister had not published any of his earlier papers upon the antiseptic treatment. It was only after 1881, when Mr. Macnamara had been long at home, that with any certainty the organisms belonging to cholera and leprosy were discovered. And so the conclusions drawn by him from clinical observation confirmed. There was one feature in Mr. Macnamara's remarks which even I had not imagined before, viz., that Mr. Macnamara acted as a lawyer—a registrar of deeds; I am very glad to hear

it was a lucrative appointment. I must also emphasise what he says, that there is in India one of the best openings for practice within the British Empire. It is utterly useless to go to places like South Africa and those isolated stations. If you go to a town like Johannisberg, it is a cosmopolitan place, where you have to compete with German and American doctors; the town is very fairly healthy, and the number of doctors overcrowd one another even more than they do in England. The same remark applies to the small cities in Australia. One can hardly imagine it, but it is so, and I am speaking without disrespect to such; for instance, Adelaide is a comparatively small city. Whereas in India there are opportunities, and the best introduction one can have when starting in India is to enter by the Indian Medical Service, and then, as Mr. Macnamara has said, you will have time to look round for a couple of years, and get some notion of what you are fit for and what you can do, and then take your own line. I am sure the Guthrie Society is most grateful to Mr. Macnamara for his remarks, and I shall only be expressing your wishes when I ask you to join in giving a hearty vote of thanks to Mr. Macnamara for the pleasure he has given us this evening.

Mr. THOMAS BOND, F.R.C.S.: It gives me very great pleasure to second Mr. Spencer's motion. I am sure the prevailing feeling amongst you all, after having heard these very interesting reminiscences of Mr. Macnamara, will be what a marvellous amount of work he has done in his useful lifetime. He has had two careers —an English and an Indian career. Many men when they have had one career think they have finished their life work—military men as well as professional. When they come from India they think they have done their work, and finish their life in their club. Mr. Macnamara did nothing of the sort. He finishes his career in India honourably and successfully, and he comes home to commence another career, and I am glad to say he has not finished that, but is in the zenith of his work and success. It must be very gratifying to Mr. Macnamara to look back upon such a lifetime, and it is gratifying to us to have him here to honour and respect him. With regard to sport, he has had such a life of work that I think the time is rapidly approaching when he might commence sporting again. is very fond of pig-sticking. He might have something like

it if he would only come down to Exmoor to spend his holidays. He might have his riding, and might even have the excitement of the old boar turning on him. Last year a stag went for me, but when he came close to me I suppose he thought me too formidable, for he jumped over me, horse and all. I am sure, apart from this sporting point of view, that the incidents which Mr. Macnamara has given you of his life must be not only entertaining, but most instructive. There is one thing you should especially lay to heart, that is, that it is no good going to a foreign country and drifting about and thinking that something will turn up. You must lay yourself out for a certain course and run it. You must first get to one point, and when you get there, you must get something further. You will not get people to push you there, you must get there yourself. That is the secret of success in life. I am sure you will join in the resolution which Mr. Spencer has proposed, and which I have seconded.

The resolution was carried unanimously.

Mr. MACNAMARA: Mr. President, Mr. Bond, and Gentlemen, I am obliged to you for the kind way you refer to my work. I had intended to make some remarks upon cholera, but I thought, perhaps, on the whole, I should be occupying too much time, and therefore I left them out. What you have said is very much to the point. You have given my opinion and view better than I could have done, not liking on such matters to speak about myself. I am extremely obliged to you for the remarks you have made. This is probably the last time I shall have an opportunity of addressing the students of the Westminster Hospital. It has given me much pleasure in coming among you to-night, and going over the story of my life in India. As we advance in years we love to dwell on days gone by; but I cannot, if I wished it, follow Mr. Bond's advice. There is no beginning again; at the same time one has got sufficient vigour and strength to be of some use, though I fear not much longer in this hospital. I thank you all very much for the attention and kind expressions you have bestowed on me this evening.

THE TREATMENT OF LARYNGEAL TUBERCULOSIS.

By F. DE HAVILLAND HALL, M.D., F.R.C.P.

THE treatment of laryngeal tuberculosis is a subject which must necessarily be one of the greatest interest to the medical profession, as it has been calculated that every thirty-fifth patient dying in the practice of a general practitioner is afflicted with this disease.* If anything was required to increase this interest we have only to consider the distressing nature of the symptoms of this malady, and the eagerness of patients to obtain some alleviation of their sufferings. A few years ago laryngeal phthisis was regarded as a hopeless disease. Morell Mackenzie, in his classical textbook (1880), writes: "The prognosis of laryngeal phthisis is always extremely unfavourable, and it is not certain that any cases ever recover. Of all the cases of laryngeal phthisis that I have ever seen, I only know of four in which I have reason to believe that the disease was entirely arrested." In analyzing the duration of life in 100 cases subjected to post-mortem examination, he writes: "It will be seen that in the greatest number of cases death occurred in from 12 to 18 months, and that 66 per cent. occurred between 6 months and 2 years. Further, it is to be observed that very few patients lived more than 2½ years, and very few died before 6 months." The local treatment at this time was practically limited to the application of astringents and the insufflation of morphia for the relief of pain and dysphagia. The consequence was that when the practitioner found that his patient was attacked with laryngeal tuberculosis he knew that he was dealing with a hopeless disease, and that his unfortunate patient had before him the prospect of a lingering and painful death. Thanks, however, to the increased amount of attention that has been paid to laryngeal affections, and thanks more especially to

* St. Clair Thomson, Practitioner, July, 1896.

the discovery of the local anæsthetic action of cocaine, the way was paved for the work of Heryng, Krause, Gougenheim, and others, who have demonstrated that laryngeal tuberculosis is no longer the incurable disease it was considered in the past, and that even if the fatal termination cannot be absolutely arrested, still much may be done to relieve the patient of his most distressing symptoms. The great point to bear in mind in the treatment of laryngeal tuberculosis is that the disease must be treated at the earliest possible stage; the best results are obtained in those cases in which the patients have only very slight tubercular mischief in the larynx.

At the present time the treatment of laryngeal tuberculosis may be divided into palliative and surgical measures. The former method is to be adopted where either the local or general condition or other considerations preclude the carrying out of more radical measures. One of the earliest symptoms of laryngeal phthisis which requires treatment is the hacking, irritating cough which is so frequently present. This is best combatted by sedative inhalations such as the vapor benzoini or coninæ. In some cases a 10 per cent. solution of menthol in fluid paraffin used in the form of spray from an oil atomiser gives much relief, or the following solution may be sprayed into the larynx whenever the cough is troublesome: ℞ cocainæ hydrochlor. gr. xvi; resorcinæ gr. viii; aquæ ℥i. The addition of resorcin to the solution prevents the cocaine crystallizing out and the solution decomposing, and increases the anæsthetic action, at the same time that it diminishes the toxic action of the cocaine. Where there is an extensively ulcerated surface in the larynx I have found the following insufflation answers better than a spray: ℞ morphinæ hydrochlor.; cocainæ hydroch.; āā gr. ⅛. Acid; borici.; iodoformi; āā gr. i. M.ft. pulv. This may be used two or three times a day, and if employed half an hour before meals it will diminish the pain of swallowing, and if used the last thing at night it will generally ensure some hours of sleep. It is usually possible to instruct some relation or friend of the patient how to insufflate the powder in the absence of the doctor. With the use of this insufflation and appropriate general treatment I have occasionally seen fairly extensive ulceration of the larynx heal up, and in all cases the patients derived marked relief from the application.

Dr. David Newman* recommends a spray of iodoform. The method of carrying out this treatment is as follows: The larynx is sprayed with a solution of cocaine, and when it is sufficiently anæsthetized, the pharynx and larynx are freely sprayed with a concentrated solution of iodoform in alcohol and ether. This is repeated at first twice daily, and subsequently three times a day. He says: "At first the patients complained a good deal of the irritation of the applications, but after a few days they experienced so much benefit from the spray that they were willing to have it used as frequently as was desired."

In cases where there is difficulty in swallowing fluids, owing to the liquid entering the larynx, if the patient is placed prone across the bed, with the head hanging over the side, and instructed to suck up milk or other liquid from a mug placed on the floor through a piece of india-rubber tubing, this difficulty will be obviated.

Under the head of the surgical treatment of laryngeal tuberculosis, I would include the following methods:—

(1) The rubbing in of lactic acid with or without previous curetting, and the submucous injection of lactic acid.

(2) The application of electrolysis, or of the galvano-cautery.

(3) Excision of affected portions of the mucous membrane by means of simple or double curettes, cutting forceps, &c.

(4) Tracheotomy.

The first method, viz., the rubbing in of lactic acid, either without, or after curetting, has won for itself a secure position in the treatment of laryngeal tuberculosis. The mode of carrying it out is as follows: The soft palate is first sprayed with a 10 per cent. solution of cocaine containing some resorcin; after waiting 2 or 3 minutes a 20 per cent. solution of cocaine in 10 per cent. solution of resorcin is applied to the larynx by means of cotton-wool on a suitable holder; 2 minutes later a second application is made, care being taken to rub in the cocaine solution over the ulcerated surface, and to free it from any muco-purulent secretion; again, waiting 2 minutes, a 20 per cent. solution of lactic acid is applied by means of cotton-wool wrapped round Krause's forceps, and the acid is firmly rubbed in over the ulcerated surface. The patient is directed to return the next day but one. If the lactic acid has not

* Proceedings of the Laryngological Society, vol. iii., p. 44.

caused much reaction the strength of the solution may be increased at the next sitting to 30 per cent., and so on, until in intractable cases the pure acid may be employed. As a rule, applications should not be made oftener than alternate days, and after three or four applications twice a week will be found sufficient. In superficial ulceration in favourable cases three or four applications will effect a cure; in cases of deep-seated or extensive ulceration fifteen to twenty or more applications may be required. If much pain results from the application the patient should be directed to suck pellets of ice, and an ice poultice may be applied over the larynx. Curetting is required in cases of infiltration without ulceration, or where there is much proliferation over the ulcerated surface. Heryng's curettes fulfil all indications. The larynx is cocainized as previously described, then the curette is used, and lactic acid rubbed in afterwards. Should much bleeding follow the use of the curette, it can be checked by the application of a mixture of solution of perchloride of iron and lactic acid in equal parts. If there is only local swelling and no ulceration, Heryng advises that lactic acid should be injected beneath the mucous membrane by means of a sharp-pointed syringe devised for the purpose. A few minims of a 2 per cent. solution of pyoktanin may be injected in a similar manner; this method relieves pain, and after repeated injections great improvement has resulted.

2. Of electrolysis I cannot speak from personal experience. From a study of the literature of the subject I do not find that it has many adherents, nor do I gather from the writings of its warmest partisans that it has any very great advantages over other and easier methods of treatment. I do not therefore recommend its use. The galvano-cautery has a somewhat limited field of utility, but within this domain it is a method of treatment which furnishes some useful results. The great drawback to its employment are the numerous sittings necessary to attain any marked effect. I have employed it for chronic tuberculosis to reduce the bulk of swollen epiglottis and arytenoids. Dr. Semon has employed it successfully for an allied condition—lupus of the larynx.

3. We now come to the consideration of the more purely surgical treatment of tuberculosis of the larynx, viz., that proposed and carried out by Krause, Heryng, and Gougenheim.

These surgeons, by means of the double curette or cutting forceps, remove portions of the epiglottis, of the ary-epiglottic folds, or even one or both arytenoids. I have not employed this plan of treatment, nor have I seen a patient upon whom it has been carried out. I am therefore not in a position to speak with any authority on the subject. In a discussion on tubercular laryngitis at the Pan-American Medical Congress in September, 1894, Dr. Bryson Delavan * made the following suggestive remark: "He fears that we shall not be so successful in this country with the heroic treatment of Krause as they have been in Germany, because the American will not submit to treatment in the way the German does." In our own country this method of treatment has yet to win its way to anything like general acceptance.

4. Lastly, the question of tracheotomy will from time to time force itself to the front. There are of course occasionally cases in which suffocation is threatened by voluminous œdema of the epiglottis and ary-epiglottic folds; here tracheotomy is necessary to preserve life; but I am rather thinking of another class of cases in which tracheotomy is proposed with other objects than the relief of dyspnœa. Tracheotomy, as a curative measure for laryngeal phthisis, was originally proposed by Moritz Schmidt, of Frankfort, but evidence in its favour is wanting; it certainly has one great drawback, and this is that there is increased difficulty in coughing, and consequent inability to get rid of sputa from the lungs. Percy Kidd † has ably summed up the advantages and disadvantages of tracheotomy in laryngeal phthisis, and points out that the weight of evidence is against the performance of this operation, except where life is threatened from stenosis of the larynx. My experience of tracheotomy in laryngeal phthisis quite accords with the views expressed above, and I would only advise its performance as a last resource for the relief of threatened suffocation. More recently it has been suggested that thyrotomy should be performed, and all the parts that have undergone tuberculous changes should be extirpated. Such radical treatment does not commend itself to my judgment. I will now proceed to point out what are the objects of, and the limitations opposed to, the surgical treatment of laryn-

* Journal of Laryngology, 1894 p. 766.
† Lancet, 1888, vol. i., p. 619.

geal tuberculosis. I take it that the objects which every laryngologist would place before himself when called upon to treat such a case are in the first place to cure the disease if possible; if this is unattainable, to relieve pain and cough; to facilitate deglutition, which is so frequently interfered with on account of the agonizing pain the act of swallowing causes, or from attacks of suffocation owing to food entering the larynx; and lastly, to prevent death from interference with the respiratory function of the larynx. We know now that it is practicable in a certain proportion of cases to achieve a definite healing or cicatrization of a tubercular ulcer of the larynx. In fact I have seen this occur in exceptional cases, even without any very active local treatment, when a patient has been placed under favourable circumstances.

In the discussion on the surgical treatment of laryngeal phthisis at the International Medical Congress of Rome, Fraenkel very wisely pointed out the need to define the indications for surgical interference more distinctly than has yet been done. He said: "How little durability there has hitherto been in the views with regard to the treatment of tuberculosis of the larynx is shown by Heryng's remarks with regard to lactic acid. Not long ago there were writers who would have considered it a kind of sin of omission not to have employed lactic acid in any case of laryngeal phthisis, and now Heryng, one of the partisans of lactic acid treatment, states emphatically that lactic acid is only indicated in certain cases. It would therefore be necessary in the treatment of laryngeal phthisis to individualize in each case, and to select judiciously from among the remedies at hand, including surgical measures and also lactic acid. It will be the duty of workers in the immediate future to lay down more decided indications for the adoption of the different modes of treatment in order to make the choice less empirical, and to facilitate the appreciation of the general aspects of the cases."

In the first place, then, one would exclude from anything like radical treatment patients who are in the last stages of pulmonary consumption and suffering from hectic fever and wasting, cachectic patients, and cases of diffuse tuberculosis of larynx and pharynx. All that it would be justifiable to do in such cases would be to order sedative sprays and insufflations

to relieve pain and odynphagia. Krause, however, advocates operating in certain cases of advanced pulmonary and laryngeal phthisis. He says: "It is even possible in the latter days of life to often relieve or remove the most tormenting and depressing difficulties of swallowing by the excision of a particularly painful infiltration upon the epiglottis or one of the ary-epiglottic folds, and to throw a small ray of hope upon the hours of suffering of the despondent, dying patient." *

The most successful cases for treatment are those in which the tubercular ulceration is of a superficial character, and in situations readily accessible, as, for instance, the epiglottis, ventricular bands, and vocal cords. In these cases excellent results may be obtained by the energetic rubbing in of lactic acid, if the ulceration is deeper or surrounded by an inflammatory swelling, and in some very chronic ulcerative processes curetting followed by the application of lactic acid is the proper treatment. The advocates of the double curette and cutting forceps recommend these instruments in cases of polypoidal outgrowths and infiltrations of the epiglottis and ary-epiglottic folds, more especially if they give rise to difficulty of breathing or dysphagia.

The application of lactic acid and of the galvano-cautery can be made in the consulting-room, but more extensive surgical procedures must be done at the patient's home or in the hospital. The local treatment of laryngeal tuberculosis requires considerable skill and perseverance on the part of the operator, and much patience on the side of the patient. The patient should be kept under observation after the apparent healing of the ulceration, as relapses are common, and it is desirable to institute local treatment immediately that signs of fresh mischief show themselves.

I commenced my paper with the local treatment of laryngeal tuberculosis, not that it is sufficient in itself to arrest or cure the disease, but because I was particularly anxious to direct attention to the improved methods of treatment by the direct application of remedies to the local malady. It is, however, only by the intelligent combination of local and general treatment that we can hope to check the progress of a disease until quite recently regarded as incurable. General treatment may

* Journal of Laryngology, 1895, p. 574.

be considered under the following heads:—(1) dietetic, (2) hygienic, (3) climatic, and (4) medicinal. I place dietetic treatment first, as I believe it to be the most important. If laryngeal tuberculosis is to be cured, the way to effect this is through the stomach. Any plan, therefore, which upsets the digestion is self-condemned.

The all-important element in the dietary of a tuberculous patient is fat. It is very striking to observe in consumptive families how those members who eat butter and fat freely are apparently exempt from the heritage which affects the other members. Hence the cardinal rule in cases of suspected or incipient phthisis is to endeavour to induce the patients to take fatty substances. Chief amongst these I would place butter, and I cannot imagine a better article of diet for consumptive patients than bread and butter cut very thin. The intimate division of the butter and its combination with a farinaceous body favours its digestion. Fat with meat should be taken, and I am in the habit of pointing out the digestibility of cold boiled bacon. Too much stress cannot be laid on the importance of milk and cream as articles of diet. Suet pudding is another way of introducing fat in a digestible form into the system. Cod-liver oil occupies an intermediate position between food and drugs. If plain oil cannot be taken by the patient, one of the numerous emulsions which are in the market may be tried. The various preparations of malt occupy a similar position to cod-liver oil.

Hygienic treatment is second only to the question of dietary, if, indeed, the two should not be considered together, as under bad hygienic conditions the digestion suffers. Pure air, pure water, and sunshine are the three great essentials from a hygienic point of view. Hence the patient should be in the open air as much as possible; his apartments should be freely ventilated and not encumbered with over much furniture; curtains and hangings should be banished, and in view of the number of hours spent in the bedroom, especial attention should be paid to the necessity of an abundant supply of fresh air at night. Pure water is required both internally and externally. Phthisical patients seem to be half afraid of washing themselves, as shown by the frequency of tinea versicolor in out-patients with this disease. Much may be done to improve the general

tone of the patient by attention to the condition of the skin. In speaking of the necessity of sunshine we trench upon the domain of climatic treatment. The ever-advancing progress of science is confirming ideas based upon empiricism. The effect of the chemically active rays of light upon the lower organisms explains the marvellous effect that sunshine has upon all processes of health. Phthisical patients should have their rooms facing south and live as much as possible in the sunshine.

The desiderata for a consumptive patient from a climatic point of view are—sunshine, a fairly uniform temperature, or at all events a temperature without any very sudden or great variations, a dry sub-soil, and an absence of dust in the air and of excessive wind. The question of altitude is important; cases of laryngeal tuberculosis do not respond well to the very dry and bracing air of Davos Platz and other Alpine health resorts; nevertheless Dr. S. E. Solly * reports good results from cases treated in Colorado Springs at a similar elevation to the Swiss Alps. He says that high climates are beneficial in laryngeal phthisis, affording relatively, though not actually, as good chances of arresting or retarding the progress of the disease as in the pulmonary variety.

In the treatment of tuberculosis even more, if possible, than in other disease the greatest care must be taken that the therapeutic measures adopted do not interfere with digestion and assimilation. So long as the patient has a clean tongue, a good appetite, and a regular action of the bowels, hope may be entertained of the arrest of the tubercular mischief, aud any methods of treatment which tend to upset these favourable conditions must be looked upon with suspicion.

Unfortunately in many instances the patient when he first comes under treatment is already suffering from some digestive derangement. In these cases an alkaline mixture will usually be found serviceable. The Haustus acidi hydrocyanici et sodii of our pharmacopœia is a mixture which I frequently order. It contains 10 grains each of the bicarbonate of sodium and the carbonate of magnesium, 3 minims of dilute prussic acid, 20 minims of compound tincture of cardamoms in dilute chloroform water. Or an alkali may be given in a bitter infusion. My favourite tonic is the following:—3 minims of solution of

* Journal of Laryngology, 1894, p. 762.

arseniate of sodium, 10 grains of hypophosphite of sodium, 10 minims of tincture of nux vomica, in dilute chloroform water. I have seen marked improvement take place during the administration of this mixture. Fellows' syrup of the hypophosphites, or Easton's syrup, will be found of great service in suitable cases. Among the drugs reputed to have a specific action, creosote and guaiacol undoubtedly take the first place. At one time I always ordered the former, but of late years guaiacol has almost completely replaced creosote in my practice.

One or two cautions are necessary in prescribing these drugs. In the first place they are not suitable for acute cases with much febrile disturbance; they usually disagree in patients whose digestion is impaired, especially in cases where the tongue is red and irritable-looking, and where there is sickness or nausea; lastly, in order to prevent any digestive trouble, the drugs should be given immediately after food. It is hardly necessary to insist on the great importance of using absolutely pure drugs. I begin with 2 minims of guaiacol (or the same amount of creosote) in capsule three times a day, and I direct an additional capsule to be taken every third day until the patient is taking four capsules three times a day, *i.e.*, 24 minims of guaiacol daily. In some cases in which guaiacol has disagreed I have recently ordered the carbonate of guaiacol in the form of a pill, but I have not used it long enough to be able to speak with any certainty as to its action. In chronic and otherwise suitable cases of pulmonary consumption I have seen much benefit result from the steady and regular administration of guaiacol in the doses I have indicated. The improvement has shown itself in an increase in weight of the patient, a decrease in the cough, and a marked diminution in the amount of expectoration. Coincident with this improvement in the symptoms, there has been a change for the better in the physical signs, *i.e.*, the rales have cleared up, and there has been more resonance on percussion. In cases of laryngeal tuberculosis, where the diseased process is open to inspection, the beneficial action of creosote and guaiacol can be studied with advantage.

CASE OF RUPTURE OF THE VAGINA.

By J. B. Potter, M.D., F.R.C.P.

Cases of rupture of the genital canal are sufficiently rare to warrant their publication. In this case, fortunately, recovery took place.

H.C., aged 39, was admitted on October 26th, 1895. Her history was as follows:—The patient had been in labour several hours, the membranes having ruptured 10 days previously the liquor amnii had been running away constantly since then.

The obstetric clerk saw the patient at 10 a.m., os fully dilated, the head freely movable; at 12.30 there being no progress, head still at brim of the pelvis, pains had ceased. Chloroform was given and the obstetric resident applied forceps, but traction produced no result. Version was then performed, a leg seized and the child extracted easily. On introducing the hand to remove the placenta the hand passed into the abdominal cavity, the intestines being felt. Ergot, ether, and brandy were injected, an enema of hot brandy and water administered, and the feet elevated. Pulse was very rapid and feeble; Mr. Stonham, who happened to be at the Hospital, came, and on examination found a tear at the junction of the cervix and vagina. The vagina was plugged with cyanide gauze, more ether injected, and the patient sent to the Hospital. On admission she was very collapsed, and the extremities cold. After being put to bed ½ an ounce of brandy was given by the mouth and hot bottles applied to the extremities.

Dr. Potter was able to trace the cord to its insertion, and with gentle traction removed the placenta. The vagina was again plugged with cyanide gauze, and a pad of gauze and wool applied externally. Abdominal examination: tender hard mass could be felt in the lower part of the abdomen; pain was complained of in the left side. A binder was applied. At 5 and again at 7 an ounce and a half of brandy with 5 ozs. of

milk was given; at 7 the pulse was 120, and the respirations 42. A suppository of ½ a grain of morphia was introduced into the rectum, and ½ an ounce of brandy given every six hours. At 11 pulse 120, respirations 36; at 3 a.m. temperature 101.

October 27th: Plug removed and a fresh one introduced, this was done morning and evening; 4 ozs. of beef-tea and the same quantity of milk were given alternately every 2 hours. Patient complains of a great deal of abdominal pain; morphia suppository repeated.

October 29th: Plug removed and douche given, this was continued night and morning, patient being kept on her side.

October 30th: A drachm of extract of cascara given, but without result. Patient complains of abdominal pain: "Feels like wind."

October 31st: Glycerine enema given, but without result; this was followed by a simple enema of ½ a pint, which came away discoloured; patient passed a good deal of flatus, gaining much relief.

November 2nd: A pint of gruel given as an enema; small motion accompanied by great pain.

November 4th: Gruel enema repeated with satisfactory results; patient complains of much pain, and there is a mucous discharge from the rectum. Vaginal plug is saturated with a mucoid discharge, which is brownish; some comes away in the douche. The vulva having become excoriated by the gauze, iodoform gauze is substituted for the cyanide. Patient from this time went on uninterruptedly well, and got up on the 14th. She was discharged well on December 1st.

With regard to the previous history of this patient: she was married in February, 1876, and has had 12 children. The pregnancies followed one another in quick succession, there being about two periods from the birth of one child to the conception of the next. During each pregnancy she suffered from pain in the left side, which was at times severe and accompanied with much sickness. Labours always lingering, though no instruments had been used. Of the 12 children 7 are living, one was born dead, remaining 4 died young, 2 of pneumonia. Patient herself had 20 brothers and sisters; mother alive and healthy, father and several sisters died of phthisis.

The frequency of occurrence of rupture of the uterus and vagina has been variously estimated at 1 in 2,100—6,000 cases; Harris gives 1 in 4,000, but probably all the cases are not recorded. The mortality has been placed as high as 89 to 95 per cent. Jolly, quoted by Lusk, gives the mortality in civil practice 100 saved out of 580 cases, but this Harris believes to be too favourable a showing, as the proportionate loss is much less in published than in unpublished cases. As to causation, there is no doubt of the far greater frequency of rupture in multiparæ than primiparæ. In this case the woman had born a large number of children in a comparatively short space of time. In any case the prognosis is extremely bad, and treatment very unsatisfactory. The great point is in prophylaxis, and as it has now been shown that nearly all ruptures begin in the lower segment, and are preceded by abnormal thinning and distension of the uterine wall situated between the ring of Bandl and the os externum, it is this condition which has to be carefully watched, and the too long-continued pressure of the child's head to be prevented. But even in extreme cases of thinning rupture does not always occur. But this, unfortunately, occurring in a woman who has born a large number of children should be looked upon with considerable apprehension.

In the Obstetrical Transactions, vol. xx., page 295, will be found an interesting paper by Dr. Galabin on two cases of rupture of the vagina during labour. In neither case had there been operative delivery; both had a fatal issue. In the discussion on this paper, Dr. Matthews Duncan expressed the opinion that vaginal ruptures formed about one-third of all ruptures of the genital canal. In vol. xxvi. of the same transactions is the case related by Mr. Hopkins Walters, when the whole of the uterus was torn out through a rent in the upper part of the vagina, the midwife having mistaken it for the placenta and dragged it away by force. The patient recovered. In the same volume is a fatal case recorded by Dr. Horrocks, in which the rupture extended from the back of the uterus just above the cervix and along the vaginal wall to within one or two inches of the vaginal outlet.

In Ramsbotham's work on Obstetric Medicine, p. 501, Note * * * * is an interesting case which closely bears upon that

in this paper: "In the year 1839 I was called to see a patient who, after a very lingering labour, had been delivered of her first child by craniotomy seven hours and a half. An attempt had been made, unsuccessfully, to remove the placenta. I found the woman much exhausted; the uterus was firm, the placenta wholly within it. On introducing my hand into the vagina, it passed through a rent in the back part either of the vagina or cervix uteri into the abdominal cavity. I felt the posterior peritoneal surface of the uterus distinctly as well as the intestines. I withdrew it and again introduced it in a different direction, when it entered the uterine cavity. The placenta was strongly and universally adherent. I separated it and took it away with some difficulty. No blood flowed either during or after the operation, nor did any proper lochia appear, but in their place a most fœtid discharge came on which lasted till the 21st day. A portion of putrid fibrinous matter nearly as large and thick as a woman's hand then came away, certainly no part of the placenta, and the discharge ceased. She was able to leave her bed at the end of the month."

In a note on page 506 he says, "Laceration of the vagina to the extent of allowing any part of the child to pass into the peritoneal cavity is, as far as I have been able to judge, a much rarer accident than rupture of the uterus."

REGINA *v.* CHIPPERFIELD.

By THOMAS BOND, M.B., F.R.C.S.

This case is interesting from the fact that there was complete divergence of opinion between the two medical men who made the post-mortem examination on the deceased woman and myself. I happened to be out of town when sent for by the police to conduct the post-mortem examination, therefore the two local medical men were left to themselves, unassisted by an expert, and quite inexperienced in such examinations.

The Treasury Solicitor, on receiving their report, was astonished at their deductions, and desired me to critically examine the report and to read through the whole of the evidence in the case.

I herewith append the report of the post-mortem examination, which, no doubt, was carried out with great care and was perfectly accurate as to facts, but the deductions from those facts were quite contrary to the opinion I formed, and to the opinion subsequently formed by the judge and jury. The man Chipperfield was found guilty and hanged.

The following extract from the *Westminster Gazette* is a condensed account of the trial.

TO BE HANGED THROUGH A CUT IN A GLOVE.

CHIPPERFIELD SENTENCED TO DEATH.

At the Old Bailey, yesterday, Mr. Justice Kennedy commenced the hearing of the trial of Alfred Chipperfield, who was charged with murdering his wife in a cab in Islington on the night of December 18th, 1895. The prisoner was further charged with having attempted to commit suicide.

In the course of his opening statement, Mr. Avory read the following letter from the prisoner to the dead girl:—"If you only knew how I feel, you would be sorry for writing to me like this. I love you from the bottom of my heart, and no one else shall have you. I am not going on the run any more."

The first witness, Mr. Herbert Austin, manufacturing chemist, of 106, Bermondsey Street, said the prisoner had been in his employ. On

the morning of December 6th last witness gave him some cheques to pay in at the bank and an open cheque to cash. Prisoner never returned. Prisoner's landlady said on December 6th about one o'clock he drove up in a cab with a young lady. After changing his coat he drove off, saying he would return in a few days.

John Stanley, driver of a four-wheel cab, said that on the evening of December 18th he was engaged by prisoner and a young lady at Euston Station and told to drive to some number in Annett Crescent, Essex Road. After stopping at a public-house, he then drove to the White Horse public-house, Liverpool Road. The young lady remained in the cab and had a glass of wine, and he went inside with prisoner to have a drink. The prisoner then went away for about an hour, and on his return they drove towards Annett Crescent.

Dr. Robertson said from the character of the wound on the throat alone he was of opinion that it was a case of suicide, but from the position of the cut on the glove he did not think it could be so. Dr. Gray, who made a post-mortem examination, said in his judgment the wound on the woman's throat was self-inflicted, and done with the left hand. Dr. Bond, police surgeon, said from all the evidence the wound was one that was probably not self-inflicted. It was probably caused by a man sitting or standing beside her in a cab. Cross-examined: The cut on the glove particularly made him of opinion that it was not a case of suicide.

In cross-examination, Dr. Bond said the wound alone was perfectly consistent with its being self-inflicted with the left hand. The cut on the glove was what convinced him that this was a homicidal cut.

No witnesses as to fact being called for the defence, Mr. Avory summed up for the prosecution.

All this time Chipperfield sat emotionless in the box. Then Mr. Geoghegan spoke out. The charge was murder or nothing, and no motive had been assigned. All they had against him was the medical evidence. "Gentlemen," said counsel, keenly, "are you going to hang a man on the evidence of a dirty scrap of leather?"

The judge said it was for the jury to decide between Dr. Robinson, Dr. Gray, and Dr. Bond. No motive had been shown for murder—that was quite certain. But to his lordship it seemed equally certain that there was no motive shown for suicide.

The jury, after forty-five minutes' retirement, found the prisoner guilty of wilful murder.

Called upon to say why he should not be sentenced to death, prisoner muttered: "I don't know anything about it, as I told you before, I didn't do it."

His lordship said he was not at all prepared to say that he disagreed with the verdict. He did not desire by a word to add to the horrors of the prisoner's position.

Chipperfield listened to the death sentence with dogged sullenness, leaning over the edge of the box. When the judge pronounced the last

solemn words, "And may the Lord have mercy on your soul," he raised his eyes, which had been gazing down into the well of the court, and said sullenly, "And on yours." Then he walked down to the cells between two warders.

Copy of notes taken at the post-mortem examination on body of Maria Clark (alias *Chipperfield*).

1. Body healthy and well nourished.

2. An incised, clean cut wound of neck 3½ inches in length, commencing about an inch below and half-an-inch to the inner side of the angle of the jaw on the right side and extending obliquely downwards and to the left, terminating at the inner edge of the sterno-mastoid muscle, about 1½ inches below the lower border of the jaw. Deep on the right side and getting more and more superficial towards the left. Dividing the superior thyroid and lingual arteries on the right side, and the anterior jugular vein. Also the thyro-hyoid membrane.

3. Slight wound on forefinger of left hand.

4. *Liver* healthy. Weighs 2 lbs. 11 ozs.

5. *Lungs.*—Old adhesions round apex of right. Left perfectly healthy. Both float on water, but slightly congested.

6. *Heart* weighs 7½ ozs. Valves competent. No clots in chambers or pericardium.

7. *Spleen* healthy.

8. *Stomach* weighs 1 lb. 9 ozs., and full of partly digested food.

9. *Kidneys* healthy.

10. *Uterus.*—Normal in size, and healthy. Menstruating.

11. *Brain* healthy, but anæmic.

To the Solicitor of H.M. Treasury.

DEAR SIR,

I beg to report that I have read the whole of the evidence given before the Coroner and the Magistrate in the case of "Chipperfield." I have also had the opportunity of reading Dr. Robinson's notes of the post-mortem examination. I have carefully considered the whole of the medical evidence, and am of opinion that Dr. Robinson's description of the wound in the throat of Maria Clark or Chipperfield is clear and explicit, but I do not agree with all his deductions. The wound

in the throat is not consistent with suicide unless the person were left-handed. It is consistent with a homicidal wound made by a right-handed person standing in front or on the right side of the person attacked. The knife was plunged in deeply on the right side of the woman's neck; it opened the pharynx between the base of the tongue and the larynx, and divided the large veins of the neck and two important arteries. The cut then gradually became more superficial, and ended under the ear on the left side about half-an-inch lower than at its commencement. Therefore, the direction of the cut was slightly oblique downwards. This is exactly the cut, both in direction and character, which I should expect a murderer to make if standing or sitting in front or on the right side of a person in a sitting position. The murderer, if using his right hand, would cut away from himself and not draw the knife or razor towards him. He would, therefore, necessarily make a cut on the victim from right to left, and if he were higher the wound would be from above downwards. Where it would begin and where it would end would depend entirely on the relative position of the two persons, and the evidence given on this point is not justified.

I have been shown by Detective-sergeant Buckle a woman's glove of the left-hand with a flap cut on the outer side of the forefinger. The cut is from above downwards and very superficial, and is exactly the sort of cut that would be made by the woman putting up her hand towards her throat and meeting the razor after it had been drawn across the throat. There was hardly any blood on the glove, as must have been the case if the woman had cut her throat with her left hand, as suggested by Dr. Gray, and made the cut in the glove with the heel of the razor. Again, I think the evidence given by Dr. Gray on this point is quite wrong. I have no doubt whatever that the wound in the throat of Maria Clark or Chipperfield was a homicidal wound, and that the cut in the glove was most unlikely and almost impossible to have been caused by a razor held in the woman's hand. No doubt the woman would be able to scream until faint from loss of blood, but the cut underneath the base of the tongue may have prevented articulation to some extent.

THOMAS BOND.

SOME SUGGESTIONS ON THE INFLUENCE OF SEX IN THE PRODUCTION OF ANÆMIA.

By W. A. WILLS, M.D.

In the course of out-patient practice a physician cannot fail to be struck by the great difference in the frequency with which anæmia as a definite complaint occurs in men and women respectively. So marked and familiar is this difference of incidence that one almost feels an apology to be necessary for any reference to it. Nevertheless in books dealing with the subject, I find the sex incidence mentioned indeed, but very little attempt made to explain it. I had hoped to gain some useful information from a pamphlet by Dr. Samuel Fox, published in 1839, entitled "Observations on Chlorosis showing its cause to be independent of sex," but unfortunately at that period the liver took a very prominent position as a causative agent in disease, and so much of his argument is based upon the influence of this organ that it is valueless at the present day. Hence, I think, a short reference to one or two important points is permissible.

Let us first put aside those cases where the anæmia is a purely secondary condition, as in chronic kidney disease and cancer, and also those fatal cases to which the term "pernicious anæmia" has been given. We will, for the moment, confine our attention to the simple anæmia or chlorosis, such as is daily met with in every out-patient room in the kingdom. If, as is the case in our hospital, the female patients are seen on one day and the males on another, you soon come to regard the one day as devoted as much to the treatment of anæmia as the other is to that of winter cough and the effects of alcohol. About this proportionate incidence of disease I think there can be no doubt. Certainly a reference to the in-patients' register for the last eleven years shows the same proportion; male admissions 26, female 413.

I think it may fairly be granted that anæmia of sufficient severity to be classed as a separate disease is commonly a disorder of women.

Why is there this difference of incidence? Is it the result of difference in life-habit, in character of work, or is it due to sex peculiarities.

Clearly anæmia is largely a disease resulting from unhealthy surroundings, particularly such as exist in large towns like London. Insufficient sunlight and fresh air, and want of adequate exercise, are powerful factors in its production. But both sexes are exposed to these influences, and though women certainly are more frequently occupied indoors than men, yet there are quite enough men who work under similar and equally unfavourable conditions to produce a definite class of male anæmic patients, if there were not other causes at work as well: and that, in the case of women, environment is not wholly responsible, is proved by the fact that we meet with quite a number of anæmic girls whose ill-health has begun when living in the country, under what appear to be favourable conditions. Over-work and long hours, often in a very polluted atmosphere, are certainly powerful factors in producing this disease, and I am afraid that women, owing to their being less able to protect themselves, are perhaps more subjected to these influences than men. But young men do not by any means escape such over-work and undue strain, and there is no doubt that in a certain number of them this results in the development of anæmia; but I think not to a sufficient extent to make this disease a predominant one in their sex, as it is in the case of similar young women.

If it be granted that there is not sufficient difference in the occupations and surroundings of the two sexes to account for the varying incidence of anæmia, we are then forced to look elsewhere for its cause, and we must consider if there is any salient difference in the constitution of man and woman which may account for the variation. Is the existence of menstruation in the female sex a sufficient cause for the frequency of anæmia in women?

Undoubtedly typical anæmia can be produced in any man or woman by an ordinary hæmorrhage; no more typical example can be given than the effect of profuse hæmatemesis. A person who has recently lost a large quantity of blood in this or any

other way, is markedly chlorotic, and his symptoms and physical signs differ in no way from those of any other anæmic patient. Under favourable conditions if such a patient is given time for fresh blood production, the anæmia gradually disappears, even without treatment.

Is not menstruation a very similar, though less severe, hæmorrhage, which has the additional disadvantage of recurring at short intervals, and accompanied in many cases by nervous disturbances of the very kind calculated to also influence the blood-producing processes? For it seems evident enough that in some cases anæmia may result entirely from nervous shock and disturbance.

It is perfectly true that menstruation is a normal function and ought not to result in illness, and in ninety-nine cases out of a hundred it will not so result. But if you subject women to abnormal conditions, as is undoubtedly done in modern life, and let them spend their time when menstruating in the same way as when free from this function, illness is apt to occur. Undoubtedly the greater number of female hospital patients, particularly young unmarried ones who are in "business" or domestic service, never have any chance of varying their occupation when menstruation occurs, and hence the normal recuperative energy, which replaces the lost red corpuscles with rapidity, becomes more and more diminished, and anæmia is gradually produced.

That there is a very close relationship between menstruation and anæmia is a truism that hardly requires proof, but still it is interesting to observe that statistics* show as clearly as common knowledge that anæmia occurs most in women at the age when menstruation is active. It hardly occurs at all before this function commences, and ceases with the climacteric. Its greatest incidence is from 10—20, when the function is commencing, and experience will probably supplement statistics by agreeing that from this decennial period, the 5 years from 14 to 19 may be selected as especially fruitful in anæmia, and that the 10 years, 15—25, would probably include at least nine-tenths of the total number of such patients.

* West. Hosp. Reports 1885—1895. Med. Reg. Report—

Under 5	5—10	10—20	20—30	30—40	40—50	50—60	over 60
2	0	205	186	33	11	2	0

Surely this is just the period of life when most of the conditions of life exist which I have tried to show are fruitful in conjunction with menstruation in producing this affection.

Of course it may be said that if the existence of menstruation be a potent factor in the production of anæmia, as soon as amenorrhœa sets in the patient's anæmia should begin to recover, but I think the answer to this is, that by the time this has occurred the anæmic state has produced so many collateral changes, such as muscular weakness, indigestion, and constipation, that recovery is difficult without therapeutic assistance or change of surroundings. Moreover, with regard to such concurrent conditions as dyspepsia and constipation, it is exceedingly difficult to say how far they are causes and how far effects; but surely as causes their incidence on the two sexes must be very similar, and therefore they will not explain the varying frequency of anæmia in men and women.

The more one looks into this question, the more one feels it to be a very difficult one, and the tendency of modern life hardly seems to be in a direction which will simplify it, for the environment and mutual re-action of the sex-relations only become more and more, rather than less, complicated.

THE PRESENT ASPECT OF THE TREATMENT OF CONGENITAL DISPLACEMENT OF THE HIP.

By A. H. TUBBY, M.S.

The treatment of this disabling deformity is one that at present exercises the minds of surgeons considerably, because, hitherto, no one method has been found to be uniformly successful, and at the present the subject is passing through a transition stage. It is now felt by those who have most experience of the treatment of this affection, that operative measures in a wide sense are very far from attaining satisfactory results, and there is, so to speak, a set-back of opinion in favour of the treatment first initiated by Paci, namely, forcible reduction and the maintenance of the limb in the abducted position. Before going into details it will be advisable to review the various phases through which treatment has passed. There is, however, one considerable difficulty in deciding which is the appropriate treatment for cases, and that is, the comparative scarcity of specimens in museums from which to gain definite conclusions. But it would seem that certain factors are always present at birth in truly congenital cases, namely, the acetabulum is, as a rule, in its normal position, but it is abnormal in shape, either triangular, oval, or elongated, but very seldom absent. In certain cases, notably those described by Lockwood, the cartilaginous rim is wanting, and the mass of fat at the fundus of the acetabulum, the gland of Havers, is much hypertrophied. When the cotyloid border is defective the cavity is almost continuous with a flattened surface on the iliac bone, which is sometimes covered with cartilage, indicating the new position taken by the displaced head. The neck of the femur is round, or irregular, or flattened. In some cases it is said to have been absent even at birth, but this point is not well authenticated. The neck is short and

conical and forms an angle rather less obtuse than normal with the diaphysis.

The round ligament is flattened and slender, and in many cases is absent. The capsule is elongated, thinned, its capacity much increased, and sometimes it is distended with fluid. There is often considerable displacement of muscles, and Lockwood has stated that those which surround the joint participate in the disturbance of position, and the obdurator externus and quadratus femoris are dragged upwards by the ascent of the head of the femur. The ilio-psoas lies in a deep groove which is situated just below and internal to the anterior inferior spine of the ilium, and the tendon of the psoas winds backwards in an exaggerated way to reach the less trochanter. Such are the appearances often seen, and the points to be recognised at this period of life are: the abnormal shape of the acetabulum, its shallowness, and the frequent deficiency of the cartilaginous rim around it. In children who have walked, the acetabulum is seen to remain small, shallow, and triangular. Above and posterior to it and around the new socket there is sometimes found a growth of bone which forms a partial rim for the latter, and to which the capsular ligament is attached.

The neck may be shortened or absent, and then the head is supported directly by the shaft, but in other cases the neck is still quite distinct, and an important point is the change in its direction. In cases in which the displacement is dorsal the neck is, as it were, bent backwards; in cases of anterior displacement it is bent forwards, so that it no longer forms a proper angle with the shaft. This is an important point in the question of treatment by manipulative measures, as in some cases, while it is quite possible to get the head in a good position, the whole limb and the foot remain turned outward or inward, as the case may be. The capsule is elongated, dilated, and in some cases thinned, while in others it is much thickened. It sometimes has a curious hour-glass shape, and its cavity is constricted about the middle. The muscles are stated to be contracted considerably, and their contraction in some cases forms a distinct hindrance to reposition of the head of the bone. In adult life these changes are much exaggerated, but Bradford and Lovett remark that the new cavity, in which the head of the femur rests, is often deep enough to form a good support.

The pressure of the head of the femur in its new position causes absorption of the periosteum and the joint-capsule in that place, and the capsule finds a new attachment in the osteophytes thrown out to form an upper rim to the cavity in favourable cases. Muscular contractures around the joint are best seen in adults, and they are no doubt due to the abnormal position of the head of the femur and to the slight flexion and rotation of the thighs. Considerable shortening is found in the psoas and iliacus and in the peri-trochanteric muscles, while the adductors and internal rotators are affected to a less degree. Such then, in brief, are the essential departures from the normal which are found at birth, during childhood, and in adult life.

The *methods of treatment* of congenital displacement of the hip are three, namely:—

1. Extension, either in the recumbent position or by apparatus;
2. Operative measures;
3. Forcible reduction.

1. *Extension, either in the Recumbent Position or by Apparatus.* This is the oldest form of treatment, and among its advocates are Praraz, Buckminster Brown, and William Adams. But to Buckminster Brown should be ascribed the credit of having for the first time treated cases in this way with considerable success. He subjected his patient, a little girl, aged 4 years, to complete recumbency with extension for 13 months, and then allowed her to get about for a year in an arrangement by which she could imitate the movements of walking without bearing her weight on the legs. At the end of 2 years and 3 months the trochanters were in place, lordosis had disappeared, and the child was able to run about normally.

Unfortunately, the case, when seen nine years after the conclusion of treatment, had relapsed. In this country Mr. William Adams has advocated this method of treatment, and his experiences are recorded in the *British Medical Journal*, February 22nd, 1890. But we are not told that the patients were able to get about ultimately without apparatus of any kind. I have tried recumbency with extension in two cases with a great promise of success, and at present the patients are getting about and walking with an extension apparatus on, and I am waiting until the apparatus has been off for a year before fully reporting the cases.

Sometimes, when it is not possible to submit the patients to prolonged recumbency, I advise the following modification of this treatment, namely: the use of weight-extension at night and the wearing of an extension-instrument by day, the patient being allowed to walk about at will. This plan is very useful in children under 4 years of age, but is not successful for older children.

2. *Operative Measures.*—Those most in use are Hoffa's and Lorenz's. The details of Hoffa's operation are sufficiently well known. When carried to its full extent its severity is very great. It almost amounts to amputation at the hip-joint with the femoral artery and vein, the anterior crural and the sciatic nerves alone left intact, and there is wide and deep gouging of the bone at the site of the deformed acetabulum. Personally I am strongly of opinion that it is not advisable to persuade a patient to undergo Hoffa's operation, because of the somewhat unsatisfactory result by which it is so often followed. Hoffa* details the results of 112 operations by him on 82 patients, 30 of them had bilateral, and 52 unilateral displacements. Death occurred in three cases, two of them being due to prolonged anæsthesia, hæmorrhage, and shock, and the third to iodoform poisoning. In nine cases, ankylosis of the hip followed, and a return of luxation in eleven. Dr. Halsted Myers in the "Annals of Surgery," August, 1894, remarks that he has notes of 177 cases of Hoffa's operation or some of its modifications, and among these are six deaths, due directly to operation, namely: three of Hoffa's, two of Kirmisson, one from hæmorrhage and peritonitis, 8 days after the operation, following perforation of the acetabulum, and one from septicæmia. Also there is one death in a case operated on by Broca. Kirmisson states that he knows of a few fatal cases in the hands of other surgeons, which he is not authorised to mention. Another point that militates against Hoffa's operation is the fact that cure is by no means certain. Hoffa has himself stated that he wishes it to be distinctly understood that these children cannot be completely cured, since there is always left some shortening of the limb. In bilateral cases, however, he can reduce the waddling gait to a minimum, and can almost completely overcome the lordosis.

* B. M. J., Epit., p. 514, July, 1895.

Lorenz's operation:—The details of Lorenz's operation are division of the tensor vaginæ femoris, through a longitudinal incision, starting from the anterior superior spine of the ilium, and to the first incision is added another passing transversely inwards, at the level of the trochanter; the anterior wall of the capsule is then denuded and the capsule opened by a crucial incision, the acetabulum is hollowed out, the head of the femur re-formed if necessary, after which it only remains to pull on the latter until it is brought down to a level with the cotyloid cavity; much assistance is now afforded by section of the hamstrings; lastly, the limb is put up in a position of slight abduction; in 4 weeks' time massage and gymnastic exercises are begun, and these must be continued for a year. The advantages of this operation consist of causing comparatively little interference with the muscles. In Dr. Halsted Myers' paper in August, 1894, in the "Annals of Surgery," on Congenital Dislocation of the Hip, he there remarks that Lorenz had then operated on 63 cases and had recorded no deaths, and but three relapses.

Since then Lorenz must have found much cause for modifying his opinion of the value of his operation, as "after much thought and careful observation of the cases he has operated on, he resolved to alter his procedure in many cases, and has carried out bloodless reduction with perfect success." This statement coming from so experienced a surgeon as Lorenz, one who has devoted himself so much to the subject, is worthy of the gravest consideration. But before Lorenz had arrived at this conclusion other surgeons' thoughts were drifting in the same direction. For instance, Professor Schede of Bonn, who has had experience of treating such cases in two ways, either by the operative method or by the method of rest, combined with extension and abduction of the limb, reported very favourably of the latter method.

Paci's manœuvres are carried out as follows:—The patient lying down, the surgeon flexes fully the leg on the thigh and the thigh on the pelvis. This movement carries the head of the femur downwards, especially when assisted by direct pressure. The thigh is now abducted slightly. After this the limb is strongly rotated outwards, and then rather more rapidly fully extended. The last movement throws the head

of the femur into the acetabulum, if there is one. Paci, in 1894, reports on fifteen cases, and they were almost perfect a year or more after operation. With the idea of more effectually fixing the head of the femur in its new position, or into its proper position, Lannelongue advises the injection of a few drops of a 10 per cent. solution of chloride of zinc at intervals of 3 or 4 weeks. This method has answered very well. Lorenz has modified Paci's method in the following way. His present procedure is as follows:—First, lowering of the head of the femur by traction, then depression of the head of the femur to the utmost degree by flexion, followed by forcible abduction. The penetration of the head into the cotyloid cavity is announced by a perceptible shock and click. Thirdly, fixation of the femur by a plaster of Paris bandage, which prevents reproduction of the dislocation. The treatment of plaster of Paris should be continued for several months; the position of the femur gradually becomes more normal; the tendency to the recurrence of dislocation fortunately decreasing. Lorenz has now employed this method of treatment in forty-three cases, aged upwards of 6 years, and met with success in every case. No apparatus was ever used after the treatment was finished. As a modification, Mickulicz employs an apparatus by which extension is made after the reduction, together with considerable abduction, and the head of the femur is pressed firmly into its new position.

It would seem, then, that of the three methods that have been described, that of recumbency with extension, although fairly well tried, has not been quite satisfactory; that of open operation, namely, Hoffa's method, is somewhat dangerous, is by no means perfect in its result and cannot be relied upon; while that of Lorenz, although less severe, yet also cannot be said to be quite perfect; nor can the originator of that operation admit that he himself is quite satisfied with it; while there is to be noted the sudden change of his opinion in favour of the third measure, namely, forcible reduction. For my own part I have been quite unable to convince myself that it is possible, in the first place, to so deepen an imperfect and shallow acetabulum in such a way that the head of the femur can be retained, in spite of all the shocks of body movement and weight that it has to bear. Nor in the few cases of Lorenz's operation which I

have seen has the result been in any sense satisfactory, for either the lordosis or some up and down movement has remained, or as in one case I saw there was bony ankylosis. This was a young girl of thirteen, who went over to Vienna to be operated upon, and came back to show herself to me afterwards. I found firm bony ankylosis of the left hip, surely a very serious occurrence in view of the future possibilities of marriage and pregnancy. Nor do I think that those cases which have been operated upon in England have in any sense satisfied the surgeons that Lorenz's procedure is to be relied upon, nor that they have a distinct curative value.

In support of these views is the following abstract from the Sammlunger Gesellschaft Deustcher Naturfors chr. und Aerzte, 1896. Professor Schede, who initiated a discussion, stated that out of a total of 99 cases he had in 98 successfully reduced the dislocation by external manipulation. The age of patients ranged from that of infants up to 15 years. In children who had not learnt to walk the reduction was accomplished under chloroform by simple traction on the limb with the thigh abducted. A return of the displacement was prevented by a plaster of Paris bandage, which maintained the abducted position of the limb, and at the same time exercised pressure upon the trochanter. In all the children where this first procedure failed it was necessary to make repeated attempts, and especially to overcome in the first instance by means of extension the resistance offered to the reduction by the contracted soft parts. After reduction in unilateral cases, if the child had learnt to walk, he was allowed to go about in a plaster bandage. But inasmuch as the abducted position results in apparent lengthening of the affected limb the sole of the sound foot must be heightened to a corresponding degree. In bilateral cases it is strongly urged that both dislocations be reduced at one sitting. The thighs are maintained in an abducted position by a plaster bandage like a pair of bathing drawers, that is, it stops short at the knees. The bandage should be worn from 4 to 6 months. Lorenz, formerly the advocate of operative treatment, continued the discussion, and stated that he had been successful in securing reduction by external manipulation in 83 cases. He drew attention to the value of first employing some method of extension whereby the displaced head of the femur can be drawn

down to the level of the acetabulum. The joint is then fixed in the abducted position until the shorter adductor muscles are sufficiently stretched to allow the surgeon to proceed to the actual reduction. This latter is accomplished by flexing the thigh to a right angle and while traction is made in the long axis of the thigh, the latter is abducted until the head of the bone enters the socket with a characteristic click. The head may then be felt in its normal position in the inguinal fold midway between the anterior superior spine and the symphysis pubis, while at the same time the thigh becomes visibly longer.

The advantages of securing reduction by manipulation instead of by operation are obvious apart from the avoidance of risks appertaining to all major operations. There is no scar, there is no possibility of later contracture, nor of osseous ankylosis, and the after treatment is so simple that children may be treated as out-patients. Operative measures may therefore be said to be restricted in the future to cases in which the manipulative procedure has failed after repeated attempts. Hoffa of Wurzburg, Wolff of Berlin, and Kümmel of Hamburg, corroborated the opinions expressed by Schede and Lorenz.

It seems, then, that we have reached this position, that operation either by Hoffa's method or by Lorenz's method must be only considered as a very reserve measure indeed, and it is entirely discredited as a means of treating all slight cases whatever, and that it can only be used as a last resource and then with no certainty of success, but at considerable risk to the patient. At almost any age up to adult life the manœuvres of Paci, as modified by Lorenz, will be found to afford the best method of treatment. So far, then, we have not attained to any ideal form of treatment of this serious deformity, and the matter must remain for the present in an incomplete stage, but the best we can offer the patient is forcible reduction without an open wound.

A CASE OF PROGRESSIVE MUSCULAR ATROPHY IN A CHILD.

By A. M. GOSSAGE, M.B., M.R.C.P.

William R—, æt. 12, a schoolboy, was brought to me for weakness and wasting of the left hand and arm. The first symptom noticed by the patient and his mother was that 18 months previously he had begun to experience some difficulty in holding his fork at mealtime, the difficulty being apparently due to weakness of the muscles flexing and opposing the thumb. Following this onset there had been a gradual and progressive weakness and wasting, first of the muscles of the hand, then of the forearm, of the arm, and of the shoulder. His general health, except for a habit of dreaming and talking in his sleep, had always been excellent since infancy; as an infant he was stated to have had rickets. He had never suffered from swollen joints, and had never been subject to pains in the limbs. His parents and three other children were healthy; one child had died at the age of 2 days. There was no history of the occurrence of any form of paralysis amongst the relatives of either father or mother, and there was no history of liability to any disease in the family.

The patient was found to be a bright, intelligent boy, whose general muscular development was good, and whose chest and abdomen showed no sign of any disease or abnormality. The intrinsic muscles of the left hand were very weak and wasted, and the grasp of this hand was very much weaker than that of the other hand. In the left forearm also the muscles were all weak and wasted, the supinator longus being least affected, but the affection of the muscles was decidedly less marked than in the hand. The muscles of the upper arm were similar to those of the forearm, the triceps being here most involved. The muscles of the shoulder were less affected, but the deltoid, the supra- and infra-spinatus, and the upper part of the trapezius were smaller

than on the other side and seemed weaker; the other shoulder muscles were apparently normal. The left sterno-mastoid was decidedly smaller than the right. There was a slight lateral curvature to the right in the dorsal region and slight lordosis, but beyond this there was no evidence of any weakness in the trunk muscles. The muscles of the face, of the right arm, and of the lower limbs were normal. The knee jerks were normal. On electrical examination the affected muscles were found to show a somewhat diminished excitability to both the faradic and galvanic currents compared with the corresponding muscles on the other side of the body; this diminution was most marked in the intrinsic muscles of the hand. None of the muscles were more easily excited by galvanism than faradism, the character of the contraction was normal in all, and in all the K.C.C. was greater than the A.C.C. Sensation for touch, pain, and temperature was normal, and the patient had never noticed any alteration of sensation, nor had he suffered from any pain.

This patient has now been under my care for over a year, and during this period neither he, nor his mother, nor I myself have been able to make out that the disease has progressed at all, neither has any improvement taken place. The only treatment has been the internal administration of strychnine and iron.

Whatever be the real nature of the disease, this case is undoubtedly very exceptional. The very gradual onset and progress, with the fact that no muscle is completely paralyzed, make it certain that it is not a case of acute or sub-acute anterior poliomyelitis. The absence of any history or evidence of any alteration of sensation show that the nerves have not been affected either within or without the spinal canal, and also show that it is not a case of syringomyelia. An inflammatory process either in nerve cells of the anterior cornua or in the nerves would also, almost certainly, have produced a greater alteration in the electrical reactions than was found to have taken place. The marked wasting of the muscles, the slight alteration of the electrical reactions, and the absence of spastic and sensory symptoms, or of any symptoms pointing to the existence of disease above the anterior cornua, make the diagnosis rest between Progressive Muscular Atrophy, due to

gradual destruction of the cells in the anterior cornua, and idiopathic muscular atrophy, the Progressive Muscular Dystrophy of Erb. The latter disease, when it attacks the upper limbs, almost invariably starts in the muscles of the shoulders, and these muscles are subsequently the most severely affected. It also usually attacks more than one member of a family. No case of this disease starting in the small muscles of the hand has, I believe, been described. Both in Progressive Muscular Atrophy and in Progressive Muscular Dystrophy the course is progressive, but the disease may stop at any time. In both, too, before the affection of the side first attacked is far advanced, the disease as a rule appears on the other side. Progressive Muscular Dystrophy usually starts in childhood, but Progressive Muscular Atrophy of spinal origin generally begins in middle life, cases starting before the age of 20 being extremely rare. Gowers states, in his book on *The Diseases of the Nervous System*, that only one case beginning at as early an age as twelve has been recorded (Blumenthal). In spite, however, of the early age at which the wasting was first noticed, viz., shortly after 10 years, in spite of the curious limitation to the first affected side, and in spite of the complete absence of progress of the disease during the last twelve months, I think that the diagnosis of Progressive Muscular Atrophy of spinal origin fits in with the above-described symptoms better than any possible alternative.

A CASE OF SYPHILITIC PSEUDO-PARALYSIS:

Second Attack Five Months after Recovery from the First.

By A. M. GOSSAGE, M.B., M.R.C.P.

Some affection of the long bones at the junction of the epiphysis with the diaphysis probably occurs in all cases of infants suffering from congenital syphilis, at any rate amongst those that die. Only certain cases, however, show clinical symptoms of an inflammatory action occurring at the epiphysial line. Congenital syphilis is, however, so common that this syphilitic epiphysitis is seen fairly frequently. In rare instances the inflammation may cause separation of the epiphysis from the diaphysis. Even without the presence of clinical signs of syphilitic epiphysitis a paralytic condition of one or more limbs, in which the affected limb hangs quite helpless, is found amongst a fair number of congenitally syphilitic infants. This paralytic condition, which owing to its rapid disappearance under appropriate treatment has been called "pseudo-paralysis," has generally been regarded as due to epiphysitis, but the rapid wasting and loss of tone in the muscles of the affected limb, and the frequent absence of clinical signs of any inflammation at the epiphysial line, has led a few observers to regard it as due to some affection of the nerves. Epiphysitis and pseudo-paralysis generally appear during the first 2 months of life, but may occur at any time during the first year. The paralysis does not as a rule appear in all the affected limbs simultaneously, but one limb is attacked after another at intervals of a day or two. Under appropriate treatment the symptoms rapidly disappear, the swelling and pain, if present, depart, and the child gains control over its limbs. After recovery the epiphyses are apparently very rarely attacked again; indeed Taylor, in his book on the syphilitic lesions of

the osseous system, states that a return of pseudo-paralysis is unknown. I also have been unable to find any case of a return of pseudo-paralysis after recovery recorded in medical literature. Other lesions of congenital syphilis relapse not uncommonly when the treatment is discontinued, and it is difficult to imagine any reason why relapse of these particular manifestations should be so uncommon. The chief interest of the following case is that the patient suffered from a second attack of epiphysitis and pseudo-paralysis 5 months after recovery from a previous more extensive attack. It is noticeable that the limb affected with pseudo-paralysis in the second attack was not one of those affected in the first:—

Frank B—, a fairly well-nourished child, æt. 7 weeks, was brought to me by his mother because he had had a cough for 3 weeks. On enquiry I ascertained that he had recently screamed whenever his legs were moved, and for the past few days had seemed unable to move his arms. There had been a rash over his buttocks for a month. The patient had been born at full term after a natural labour, and had always been fed by the breast. The mother, who showed no evidence of past syphilis in mouth and throat, nor on the arms, and who had had no personal complaints pointing to syphilis beyond nocturnal headaches, had brought forth a dead child 3 years previous to the birth of her present infant, and 2 years later had had a miscarriage when 4 months pregnant. The father was stated to be quite healthy. On examining the child, his complexion was found to be of a *café au lait* tint; there was an ulcerated rash over the buttocks, and a papular, rather copper-coloured, rash over the neck and thighs; over both palms and soles there was a scaly rash; the lymphatic glands were generally enlarged, but no enlargement of the spleen could be made out; in the mouth there were some white patches, and a few small shallow ulcers, probably aphthous. There had been no snuffling nor discharge from the nose, and none were found when the patient was first seen, but a week or so later they appeared. Over the lower epiphyses of both radii and tibiæ there was considerable swelling, and there was some tenderness on pressure in these situations. There was no movement and no crepitation at the epiphysial line. Both upper limbs were hanging helpless by the side of the trunk, the patient being apparently unable to

move even the fingers. No enlargement or tenderness was found over any of the epiphyses of the humeri, and there was no sign of separation at any of these epiphyses. The joints, and the epiphyses of the remaining long bones, were normal.

The patient was treated with grey powder at first in half-grain and then in grain doses three times a day, and the mother was told to continue to suckle him. After the first week the child was better, and after 3 weeks he could move his arms freely, and the swelling over the epiphyses had materially decreased. He continued to take mercury for another 6 weeks, and then appeared to be quite healthy. The mother, therefore, left off bringing him to the Hospital for a period of 3 months, at the end of which time she brought him back, as he was suffering from a slight attack of bronchitis. The child was then slightly rickety, but showed no fresh signs of syphilis. During the ensuing week, however, during which he was given no mercury, a tender swelling appeared about the right knee. When next seen at the end of the week there was considerable swelling over the lower epiphysis of the right femur, and some tenderness; the right leg lay quite motionless, and the child seemed to be unable to move it; its muscles compared with the other side were flabby and toneless. After a fortnight's treatment with mercury the patient could move the limb quite freely, and the swelling had considerably diminished. After this his mother again kept him away from treatment for 3 months, and then brought him back for a sore near the anus. He was then found to be markedly rickety with square head, widely open fontanelle, beaded ribs, and enlarged ends to the long bones, but was fairly well-nourished, and seemed to enjoy fair health. Just by the anus was a single condyloma, which rapidly disappeared when mercury was administered. Five months later the child, although the mother still persisted in feeding him mainly by the breast, was fairly healthy, and had had no fresh symptoms of syphilis.

ON THE OPERATIVE TREATMENT OF CEREBRAL AND CEREBELLAR ABSCESSES OF OTITIC ORIGIN.

By PHILIP R. W. DE SANTI, F.R.C.S.

To A. E. Barker of University College belongs the honour of having been the first surgeon to perform a definite planned operation for cerebral abscess of otitic origin. This was in 1886, and his case, one of temporo-sphenoidal abscess, was reported in the *British Medical Journal* of December 11th, 1886. Later, Zanfél introduced the operation of opening the lateral sinus and ligaturing the internal jugular vein; this was followed by the proposal of Koerner to attack the abscess from the petrous bone, and by MacEwen who exposed the temporal lobe by removal of the tegmen tympani, and also in some cases by attacking the tegmen antri. Since then the literature of the subject has been very exhaustive, and the pathology, diagnosis, and treatment of these otitic complications have been considerably discussed. It has, however, seemed to me that every surgeon has his own particular spot for trephining in these cases, and that no two surgical text-books seem to agree on the subject. I propose, therefore, to briefly deal with a few anatomical points relating to cerebral and cerebellar abscesses of aural origin, for I think that any exploratory operation should be based on a consideration of the anatomical conditions that may be met with. It is most necessary that not only the most advantageous spot for trephining be known, but also something as to the boundaries of the brain area operated on and the depth to which it is safe to penetrate.

On examining the literature of the subject I find that most operators trephine a little above and behind the external auditory meatus. In temporo-sphenoidal abscess a half inch disc of bone is usually removed at a point $\frac{3}{4}$—1 inch above and $\frac{1}{4}$ inch

behind the centre of the external auditory meatus. Barker prefers a point 1 inch above and behind the meatus. Chauvel, from operations on the cadaver, found he could best get at the lobe by an opening immediately above the bony meatus. Schwartze operated 1 inch above the upper border of the bony meatus and $\frac{2}{3}$ inch posterior to an imaginary line erected at the middle of the meatus (Hansberg).

Dean, bearing in mind the frequent impossibility of stating from the symptoms whether the abscess is cerebral or cerebellar, has advocated and successfully practised trephining at a point $1\frac{1}{4}$ inch behind and $\frac{1}{4}$ inch above the centre of the external auditory meatus. From this opening the lateral sinus, temporo-sphenoidal lobe and cerebellum can easily be explored by slightly enlarging the hole with cutting forceps.

On examining the statistics concerning the relative frequency of temporo-sphenoidal and cerebellar abscesses of otitic origin, it is found that the greater number occur in the former and the lesser number in the cerebellum. Barr (*British Medical Journal*, 1887, vol. i., p. 723) gives 75 cases as follows:—

55 in temporo-sphenoidal lobe of cerebrum;
13 „ cerebellum;
4 „ both;
2 „ the pons varolii;
1 „ the crus cerebri.

Körner (Arch. f. Ohrenheilkunde, vol. xxix., 1890, p. 16) gives 100 cases as follows:—

62 cerebrum;
32 cerebellum;
6 both.

The record at Westminster Hospital from 1885 is as follows: of twelve cases there was abscess in seven cases in temporo-sphenoidal lobe, in one in frontal lobe, and in four in cerebellum.

Ballance, however (St. Thomas' Hospital Reports, vol. xxiii.), found, on examining the records of cases occurring in St. Thomas' Hospital and the Great Ormond Street Hospital for Children, a different state of affairs. He collected thirty-three cases, of which twenty-four were cerebellar and eleven temporo-sphenoidal. In two cases an abscess was present both in the temporo-sphenoidal lobe and the cerebellum.

These cases of Ballance's do not, therefore, agree with the

usual statistics, which go to prove that abscess in the cerebrum is three to four times more frequent than in the cerebellum.

The Topographical Anatomy of the Temporo-Sphenoidal Lobe.

This lobe lies mainly beneath the squamous portion of the temporal bone and the posterior inferior fourth of the parietal bone, and is, therefore, situated in the middle cerebral fossa. The anterior extremity of its superior convolution extends forwards under the great wing of the sphenoid; posteriorly the inferior temporal convolution extends beneath the occipital bone to the occipital lobes.

The *lateral* surface of the lobe, consisting of the first, second, and third convolutions, lies throughout against part of the great wing of the sphenoid, the whole of the pars squamosa, and against part of the parietal bone.

The *inferior* surface, consisting also of three convolutions, lies anteriorly on the floor of the middle cerebral fossa, and posteriorly on the tentorium cerebelli.

The *superior* surface is the smallest, is situated within the sylvian fissure, and is exposed by pulling up the operculum. On it lies the arteria fossæ sylvii. Thus the temporo-sphenoidal lobe presents against the bone a surface $4\frac{2}{5}$ inches by $1\frac{3}{8}$ inches in extent, and has, therefore, a considerable area for exploration.

Hansberg (Archives of Otology, vol. xxiv., No. 1) gives the following anatomical conclusions as the results of dissections of thirteen cadavers and a number of hardened brains:—

Situation and Relations of the Inferior Surface of Temporo-Sphenoidal Lobe to the Central Ganglia and to the Lateral Ventricle.

Distance to the outer surface of the nucleus lenticularis perpendicularly inward $1\frac{1}{5}$ inches, anterior to a plumb line let fall at the margin of the external meatus is about $1\frac{3}{8}$ inches (from inner plate of bone).

Just over and slightly behind the meatus the distance is also $1\frac{3}{8}$ inches.

To thalamus opticus and internal capsule $1\frac{3}{8}$ to 2 inches.

To pons 2 to $2\frac{1}{5}$ inches.

Hansberg states he has found much variability in the size of the lateral ventricles. In some cases the anterior and posterior cornua extended far into the frontal and occipital lobes so that the ventricles were 6 inches long. In some cases the descending cornu extended so far outwards that the distance between it and the outer surface of the lobe was only 1 to $1\frac{1}{5}$ inches instead of $1\frac{2}{5}$ to $1\frac{3}{8}$ inches. If a frontal section be made in the plane of the external meatus a knife introduced $\frac{4}{5}$ to $1\frac{3}{8}$ inches above the meatus reached the lenticular nucleus at $1\frac{3}{8}$ inches depth. By trephining 1 inch above the zygoma the brain can be penetrated to the depth of $1\frac{3}{8}$ inches without wounding the lateral ventricle or lenticular nucleus.

By trephining perpendicularly above the meatus or a little behind or in front of the same, if a high point be taken, *i.e.*, the upper limit of the lobe, the lateral ventricle is reached at $1\frac{3}{8}$ to 2 inches; if $\frac{1}{5}$ inch above the meatus, the descending cornu, with its choroidal plexus, is reached at a depth of 1 to $1\frac{1}{5}$ inches.

From these observations it follows that it is not advisable to penetrate the brain to a greater depth than $1\frac{1}{5}$ inches.

The great majority of cerebral abscesses of otitic origin are located in the temporo-sphenoidal lobe, the pus being usually found in that part of the lobe corresponding or close to the tegmen tympani et antri, and tending to extend inwards. They can therefore be almost always reached and evacuated within a depth of $1\frac{1}{5}$ inches. It is well known that the diagnosis of a cerebral abscess is often very difficult, and that its exact localization is in many cases impossible. I now turn to a few points in connection with the *general* symptoms of cerebral abscess of otitic origin.

Pain.—At first the pain is in the ear itself and generally very severe, later it extends to the head, being often frontal, or in the side of the head just above the affected ear; the pain is increased by percussion of the bone and heat applied locally; the pain is usually more or less continuous.

Giddiness.—This is almost always present and may be very severe. *Obstinate constipation* of a most persistent character. *Vomiting*, especially in the early stage. It is typically cerebral in nature and quite independent of the ingestion of food.

Drowsiness.—This is usually well marked. The patient can be

roused and will answer correctly, though very slowly (slow cerebration). This drowsiness gradually merges into coma.

Visual troubles.—Photophobia and contracted pupils occur at first, followed by dilatation and sluggishness of the pupil on the affected side. Optic neuritis, paralysis of the third nerve and hemiopia may be present.

Temperature.—May at first be raised; later it tends to become and remain subnormal, unless the abscess bursts into the lateral ventricle.

Pulse.—Is considerably slowed, but if lateral sinus thrombosis or other complication follow it becomes markedly rapid and feeble.

Respirations.—Also become slowed.

Paralytic phenomena.—Sometimes paresis of one arm or leg or both occurs. Facial paralysis is common. Implication of the third nerve has already been referred to. Death usually takes place from coma, but may be ushered in by symptoms of general meningeal inflammation.

Such are very briefly the typical symptoms of a cerebral abscess, though all kinds of variations, amounting to complete absence of symptoms, have frequently been observed.

Special Symptoms significant of Accurate Localization.

Disturbances in speech.—The centre for speech movements is in the third left frontal convolution. An abscess in the most anterior part of the temporal lobe may extend to the third left frontal convolution and cause aphasia.

The centre for amnesic aphasia is situated in the posterior two-thirds of the left first temporal convolution. If present, the abscess is probably in the upper part of the temporal lobe. (It should be remembered that the speech centres are on the left side in right-hand persons and on the right side in left-hand persons.)

Motor and Sensory disturbances.—A temporal lobe abscess by extension inwards and involvement of the lenticular nucleus and internal capsule may cause central disturbances of various kinds, *e.g.*, convulsions, paresis of an arm or leg with partial anæsthesia.

For the lenticular nucleus and, subsequently, the internal capsule to be affected the abscess must occupy the upper limit

of the temporal lobe, in which case the descending cornu of the lateral ventricle may be affected. If the abscess lie far forward the descending cornu escapes. Hansberg states, "If we find symptoms indicative of a cerebral abscess, such as headache, fever, vomiting, choked disc, &c., together with amnesic speech disturbances, in cases having a preceding or still existing otorrhœa, we may safely draw the conclusion that an abscess has developed in the left temporal lobe in the posterior two-thirds of the first temporal convolution. When suspicious of an abscess in the temporal lobe, if we find sensory and motor disturbances of the extremities, to which is added paralysis of the facial, we are in a position to localize the abscess. In this case the abscess will be found in the region of the posterior shank of the internal capsule. With only partial disappearance of function in this group, it may be of motility or of sensibility, we are justified in locating the abscess in this region."

Facial nerve paralysis.—If found on the side opposite to the diseased ear indicates involvement of the cortex of the brain, and is usually partial only. It is due to extension of the abscess to the genu of the internal capsule and the irritation of the conducting fibres from the facial centre.

If found on the side diseased it indicates involvement of the Fallopian canal, is well marked, and more suggestive of cerebellar than cerebral abscess.

Hemiopia—May be caused by temporal lobe abscess situated posteriorly and impinging on the occipital lobe, or by irritation of the most posterior part of the bend of the internal capsule, or by an abscess in the occipital lobe itself. Such are some of the points which may help to lead to an accurate localization of the abscess.

Cerebellar abscess.—Suppurative processes occurring in the posterior part of the petrous bone and the mastoid are those most likely to cause cerebellar abscess. From the mastoid it is usual for the infection to take place by the pus tracking through the bone at or about the neighbourhood of the concavity for the groove for the sigmoid sinus; pachymeningitis externa ensues, resulting in abscess of the cerebellum with or without lateral sinus thrombosis.

Of the symptoms characteristic of cerebellar abscess but little can be said, for they are often most equivocal. Pain is usually

most intense in the occipital region or just behind the mastoid; there may be retraction of the head, especially in the later stages; disturbances of co-ordination, such as staggering gait, falling towards the diseased side, and giddiness have been especially dwelt upon, but are by no means pathognomonic as stated. Optic neuritis is more frequent than in cerebral abscess; vomiting is usually more persistent, and constant yawning has been noted. There is always great prostration. Symptoms indicative of severe pressure on the medulla, such as very slow pulse and respirations, are sometimes well marked, but are also present in cerebral abscess. Cases have been recorded of paralysis of the muscles on the same side of the body as the cerebellar lesion.

Treatment of cerebral and cerebellar abscess.—As soon as the presence of pus is suspected operative measures must at once be taken to evacuate it; the earlier the abscess can be drained the better the prognosis. MacEwen has operated upon 19 cases with 18 recoveries. The following conditions may be met with:—

1. Abscess in the cerebrum, particularly in the temporo-sphenoidal lobe.
2. Abscess in the cerebellum.
3. Extra dural abscess, *i.e.*, between the bone and dura.
4. Sub-dural abscess, *i.e.*, between the dura and brain surface.
5. Infective lateral sinus thrombosis.

From clinical evidence and post-mortem examinations there can be but little doubt that the great majority of these abscesses are situated close to the petrous bone, often, indeed, in immediate connection with it. The trephine, therefore, should be placed close to the petrous bone.

The following steps are those I prefer to adopt:—

If symptoms of abscess, whether cerebral or cerebellar, be present, the preliminary step should be an exploration of the mastoid antrum, according to Stacke's method. In many cases the abscess has been reached from the cavities of the middle ear, in others all symptoms have ceased after opening the mastoid antrum and removal of its outer wall. By thus opening up the cavities of the middle ear the tegmen tympani et antri can be explored, together with the bony partition between them and the dura, as well as the bony partition at the sigmoid sinus.

This preliminary step permits, moreover, of the evacuation of pus, granulation tissue, choleastomatous and carious débris from the antrum and attic. Should the brain symptoms persist after this preliminary step trephining must be resorted to.

If the symptoms point strongly to temporo-sphenoidal abscess Hansberg's method, in my opinion, is to be preferred. He makes a large trephine hole with its centre perpendicularly over the bony meatus. The meatus and roof of the mastoid are then chiselled off to a depth of three-fifths of an inch, the dura raised and the tegmen tympani et antri exposed; the parts being dried and a good light thrown into the wound any carious bone that may be present will be seen and the condition of the dura, whether inflamed, adherent, or fistulous, determined. If the abscess be extra-dural it can thus easily be evacuated.

If the dura be adherent or fistulous the fistula is to be followed up, widened, and the abscess exposed and drained; any diseased bone is to be carefully removed.

Should the exploration so far give no indications of the proximity or neighbourhood of the abscess the lobe must be thoroughly explored by means of punctures in various directions with a sufficiently large trocar and cannula, bearing in mind the measurements already mentioned as to the depth safe to penetrate. In order to explore properly it may be necessary to extend the trephine hole backwards and upwards by means of Hoffman's cutting forceps. The abscess having been found, the dura is incised and the abscess cavity gently irrigated with carbolic lotion, 1 in 100 at 100° F. If the abscess be small two decalcified chicken bone drainage tubes are inserted (if large a silver or rubber tube is used), the skin flap closed, and an aperture left for the tubes. The whole is then dusted with iodoform, dressed with double cyanide gauze wrung out in 1 in 40 carbolic, and covered with a thick layer of double cyanide wool. It is almost superfluous to state that rigid asepsis must be observed throughout.

If the symptoms point very decisively to cerebellar abscess (the mastoid antrum having previously been opened), the bone can be trephined at a point 1½ inches behind and ¼ inch below the centre of the external auditory meatus. After the dura is opened the exploring needle must be passed forwards, upwards, and inwards. An abscess in the anterior and outer part of the

lobe is thus reached. This is the most usual situation of a cerebellar abscess, as it is the part nearest to the bone disease, *i.e.*, inner side of mastoid or posterior surface of petrous bone. If the abscess is in the anterior and inner part it may be necessary to puncture to a depth of 2 inches. When found the abscess is dealt with in a similar manner to a cerebral abscess. In all cases it is advisable to explore, by enlarging the trephine hole, the sigmoid sulcus up to the jugular fossa, and the posterior surface of the petrous bone up to the internal auditory meatus, for in my opinion it is not sound surgery to only open the abscess found, leaving the bone disease which has given rise to the trouble untouched.

In those cases where there are symptoms indicative of pus in the brain, though not as to its exact locality, *i.e.*, cerebrum or cerebellum, I strongly advocate Dean's method of operating.

He trephines at a spot 1½ inches behind and ¼ inch above the centre of the external auditory meatus. On removal of the disc of bone, a part of the lateral sinus and the dura mater just above are exposed. By slightly enlarging the hole upwards with cutting forceps, the temporo-sphenoidal lobe can easily be explored. No pus being found the opening can be enlarged downwards and backwards, whereby the whole diameter of the lateral sinus and the part of the dura below are exposed. Through the dura below the cerebellum is explored.

The operation need not take longer than 30 minutes, shock being thus considerably lessened.

In one case where I recently employed this method I found it excellent, though, unfortunately, the exploration was negative.

CLINICAL NOTES OF THREE CASES OF EXPLORATION OF THE BRAIN.

By Philip R. W. De Santi.

The following notes are the records of three cases of cerebral exploration which have been in my hands at the Westminster Hospital during the year 1896:—

Case I.—*Double otitis media suppurativa.—Cerebral symptoms.—Exploration of mastoid, temporo-sphenoidal lobe, and cerebellum.—Recovery.*

Sarah S—, æt. 21, was admitted under my care into Hollond Ward, February 7th, 1896.

Past history.—At 6 years of age she had measles; at about 7½ years of age, purulent discharge was noticed for the first time from both ears. The discharge was more profuse on the right side. From this period up to the time I saw her she had suffered from purulent discharge, more or less, continuously from both ears. She was under the care of my predecessor, Mr. Black, in the Aural department for some 6 years. In 1891, Mr. Black removed some past nasal growths and enlarged tonsils. In November, 1894, Mr. Black took the patient in, and explored both mastoids by Wilde's incision. She improved afterwards for a time; but in July, 1895, was subject to frequent attacks of mastoid pain, especially on the right side; and the discharge from the ear was profuse and fœtid.

I saw the patient, February 6th, for the first time. Her condition was as follows:—Up to 2 weeks previously she had been in service as a housemaid; she had, however, to give up her work on account of persistent giddiness, with a tendency to fall; she also became apathetic, stupid, and drowsy. She had persistent headache.

From the time she left service up to the date of my first seeing her, she had been steadily getting worse.

On admission, February 7th, 1896, patient was found to be very drowsy, except occasionally when she had sharp attacks of pain in right mastoid, and right parietal regions, which made her scream out. Her bowels were obstinately constipated, and she felt inclined to vomit, but did not actually do so. Her temperature was 99·4°. Pulse regular, 70. Respirations regular. Tongue furred. There was severe pain, on deep pressure, over the right mastoid, and over right parietal bone; no redness or œdema. No swelling or tenderness in the course of the internal jugular vein. There was no paralysis or paresis, loss of memory, aphasia, or slowness of speech. The optic discs were normal. There was profuse fœtid discharge from the right ear, and scars behind both ears of former operations. The whole of the membrana tympani and ossicles of right side had been destroyed. There was very severe giddiness and tendency to fall to one side, sometimes towards right, at other times towards the left.

Patient was well purged, and kept carefully under observation. The pain, however, especially over the mastoid, continued, the drowsiness and giddiness increased, and the sense of vomiting remained. It was therefore, on consultation, determined to explore for pus.

The head being shaved, cleansed, and rendered aseptic, and the external auditory meatus on each side plugged with wool, I, on February 14th, made an incision just behind the right ear from the top to the bottom of the mastoid process. Having raised the periosteum on each side, I proceeded to open the mastoid antrum with trephine and gouge. The bone was extremely sclerosed; on removal of the outer wall of the mastoid antrum, no pus was found; the mastoid cells were non-existent. No carious bone or fistulous track could be seen in the mastoid antrum or attic. I now made another trephine opening (about 1 inch in diameter) 1 inch behind and above the centre of the external auditory meatus, exposed the dura over the temporo-sphenoidal lobe, and punctured with a trocar and cannula, in various directions to a depth of 1¼ inches. No pus was reached. A third opening was now made directly over the meatus, and the tegmen tympani et antri, and the dura covering it, explored. No subdural abscess, thickening or fistula of the dura was found. The skin flaps were now closed, and a small drain left in the lower angle, and

the parts dressed with dry antiseptic wool. The operation lasted 1 hour and 40 minutes.

February 17th.—Wound dressed; looking very well. Temperature normal. Pain still very bad indeed.

February 18th.—Pain still persisted, and there was marked pain in occipital region; giddiness well marked. Mentally, patient appeared better. It was decided to explore the cerebellum. I therefore turned down a flap with the base over the superior curved line of the occipital bone, raised the periosteum, and exposed the inferior curved line; directly below this line I trephined, exposed the dura, and explored the cerebellum to a depth of 1½ inches. Both the anterior and outer, and the anterior and inner part of the cerebellum were carefully explored, as well as the deeper parts. No pus was found. The scalp flap was sutured with horse-hair; the original wound slightly opened up, and the temporo-sphenoidal lobe again explored, but with negative results.

February 19th.—Patient had a good night; feels better; pain less.

February 24th.—Patient lost all drowsiness and giddiness; pain in mastoid and head gone; wounds healed by primary union. Patient takes an active interest in all going on in the ward, and is bright and cheerful. Temperature has never been above 100·4° since the operations.

On March 4th patient was sent to a convalescent home.

I have seen this patient frequently since I operated on her, and she has remained quite well ever since, with the exception of deafness and a small amount of discharge from the right ear, which is gradually (January, 1896) getting less. She has no more pain in the mastoid or parietal regions, and the giddiness and tendency to stupor have entirely disappeared.

CASE II.—*Otitis media suppurativa.—Acute mastoid abscess and necrosis.—Cerebral symptoms.—Exploration.—Death.*

George J—, æt. 35, was admitted under me, March 5th, 1896, with acute abscess over the left mastoid process. A little before Christmas, 1895, he pricked the drum of his left ear with a hairpin whilst cleaning out the orifice; this was followed, within 3 hours of the injury, by considerable pain, swelling, and

deafness. He had, more or less, continuous pain in and around the left ear for the ensuing 6-7 weeks; the pain then became less severe and a swelling began to form over the left mastoid process. Patient stated that never at any time had he noticed any discharge from either ear. He was able to follow his work up to within a few days of my seeing him. I saw him for the first time, at my Aural out-patient department, on March 2nd; he had then a large red painful fluctuating swelling covering the whole of the left mastoid process and pushing the auricle forwards and outwards; tenderness and enlarged glands in the neck along the anterior border of the sterno-mastoid, and a temperature of 101° F.

On examination of the left ear, a large irregular perforation was seen in the membrana tympani. There were no signs of the ossicles. There was a little pus to be seen; no caries to be detected. Patient had been suffering from giddiness and vomiting for 2 days, and had had shivering fits. He was told to come in at once but refused.

Patient was brought up to the Hospital on March 5th, having become much worse; the swelling had extended, he had œdema and redness of the left upper eyelid, a temperature of 102° F., severe pain in the head (parietal region), sleeplessness, and had vomited once.

I operated the same day. The parts having been thoroughly cleansed with antiseptics, and got as aseptic as possible, a long incision was made into the abscess, and the pus evacuated; the periosteum was entirely separated from the whole of the mastoid process by the pus. There was a small soft spot over the upper part of the mastoid process and this was trephined, and the mastoid antrum opened. No pus or caries was found. I thought it probable that there might be some lateral sinus trouble, as there was swelling in the neck, in the course of the internal jugular vein, so I decided to trephine over it and examine the sinus; this I did, but found no thrombosis or affection of the bony wall. I finally explored the tegmen tympani by a third opening, but found no evidence of abscess, either extra dural, or in the left temporo-sphenoidal lobe. The coverings of the brain, however, appeared very hyperæmic; the skin flap was closed except inferiorly, where a good sized opening was left for a drainage tube, and the whole dressed

aseptically. The patient stood the operation well. He had a fair night, and on March 7th seemed a little better. His temperature, however, kept up. In the evening his temperature was 101° F.; there was severe frontal headache and some vomiting. He got worse during the night, developing symptoms of lepto-meningitis. He was very restless, then became delirious, finally comatose, and died March 9th, his temperature having risen to 106·6°.

Post-mortem.—Dr. Hebb found general cerebro-spinal meningitis. Both tympana full of pus. Ossicles gone on the left side. Dura mater not especially affected at the sites of operation. The trephine apertures were three in number:—(1) at the base of the mastoid, (2) over lateral sinus, (3) over the 3rd left inferior temporo-sphenoidal convolution.

There was no abscess of the brain or cerebellum.

CASE III.—*Otitis media suppurativa.—Cerebral symptoms of uncertain origin.—Exploration.—Death.*

Walter L—, æt. four years and nine months, was admitted under Dr. Hebb, September 28th, 1896. The child had had bronchitis since birth; measles when one year and nine months old; a little later patient had whooping cough, and subsequently a purulent nasal discharge. Double otorrhœa ensued after the measles.

Family history.—Mother suffers from a weak chest; has had 2 children, of whom patient is the elder; the other, a girl, died when 8 months old. History of one miscarriage. Maternal grandfather and uncle died of phthisis. No history of insanity or syphilis. Delivery of child was instrumental. Patient has had pains in the head, squinting, and occasional fits for the last 3 years; the first fit lasted about 5 hours, patient screaming and being quite unconscious; the eyes were widely open and staring. For the last 2 months, especially within the last fortnight, the fits have been very frequent and of about 1 hour's duration; last fit occurred September 23rd. Retraction of head noticed for a week past. Squint has become more marked during last fortnight. Patient has always seemed stupid, and has exhibited dirty and destructive tendencies. He can speak a few words; has always walked on his toes. Bowels always very constipated.

Present state.—Patient is fairly well nourished, extremities bluish; no stiffness of limbs. He is in a semi-conscious state, head retracted and stiff. No optic neuritis, but well-marked internal strabismus is present; pupils dilated, they react to light and accommodation. Chest pigeon-breasted, no abnormal physical signs. Heart apex beat diffuse, felt and seen best in 4th space half-way between nipple and sternum. At the apex is a slight systolic bruit, which rapidly increases in intensity as one proceeds to the base, where in the 2nd left space a pre-systolic murmur is heard. Abdomen markedly retracted; no tumour palpable. Spleen and liver not palpable. Knee-jerks absent. Pulse 108, regular, but small in volume. Temperature subnormal. Bowels constipated, no *tâche cérébrale.*

October 7th.—Patient a little better; head still retracted. Temperature normal. Pulse 100.

October 10th.—Vomited four times, and temperature ranged from 100·2° to 101·6°. Heart sounds unchanged.

October 12th.—At 10.50 p.m. the nurse heard the patient groaning, and found the child convulsed. The House Physician was sent for, and found the convulsions limited almost entirely to the left side. The patient lay on his back, with head retracted and drawn to the right side; both eyes deviated from the convulsed side, left more so than the right. Pupils dilated and equal; face not pale, nor lips blue; no gnashing of the teeth. Mouth open, tongue slightly protruded between the open jaws, and alternately slowly protruded and retracted; no frothing or biting of tongue; no twitching of the lips; only muscles of face acting were the sphincters of the eyelids, these being alternately contracted and relaxed. The left sterno-mastoid was acting strongly, turning the head to the right side, the head tending to return towards the middle line at each relaxation. The muscles about the left shoulder were twitching strongly, notably the pectorals, trapezius, and latissimus dorsi, the arm being held tightly to the side. The left elbow was flexed, and there was marked twitching of the biceps. Wrist joint extended. Thumb and fingers flexed into palm; visible twitchings of the muscles of the forearm. Fingers alone on the right side flexed and twitching; right lower limb flexed at the hip and knee joints, the hamstring tendons being prominent. The child cried out occasionally, and was breathing very rapidly and almost

entirely per diaphragm, the lower ribs being markedly incurved. The abdomen was tense and prominent; there was involuntary micturition. At 11.15 twitching of leg entirely ceased, and soon after that of sterno-mastoid became much less, so that the head on being turned to the left side was not drawn back towards the right. At 12 the arm twitchings had quite ceased; eyelids had ceased 10 minutes previously; 12.40, left arm again twitching, also fingers of right hand slightly. Child now swallows milk, but vomits it promptly by mouth and nose. Hst. pot. bromidi ʒij was ordered.

October 13*th*.—Temperature rose to 102·4°. Patient vomited three times during the day. Twitching still continues, affecting chiefly left arm, left side of the face, and slightly the left leg.

October 14*th*.—Temperature, 11 A.M., 100·8°. Pulse 120, regular. Clonic spasms at the rate of about one per second, though rhythm is slightly irregular; they affect left side of the face, left side of the tongue, and left upper arm, and to a very slight extent the left leg, chiefly the adductors. Pupils are equal, normal in size, and react to light. There is no optic neuritis. Child appears to be unconscious. There is otorrhœa especially profuse right side.

October 15*th*.—The left arm and left leg appear paralysed. There is still twitching of left side of face. Patient semi-conscious; vomits every now and then. Temperature ranges between 99° and 101°.

October 17*th*.—Twitchings ceased. There is loss of power in left arm and leg; muscles of latter respond slightly to plantar stimulation. There appears to be no difference in the sides of the face. The head is much less retracted. Knee-jerks and ankle clonus absent.

October 19*th*.—Aural examination by Mr. de Santi. Both external auditory meatus filled with pus. On cleansing extensive perforation on both sides is seen; discharge fœtid; no redness, pain, or œdema over either mastoid. No evidence of lateral sinus or internal jugular thrombosis. Length of time of illness and symptoms generally do not point to cerebral trouble being due to the ear mischief.

October 20*th*.—Patient has regained some power of using the left arm, but the paralysis of the left leg seems rather increased, plantar reflex being lost. Patient is subject to vasomotor

disturbances causing localized flushes about the face, which persist for a few minutes and then as rapidly disappear.

October 22nd.—Patient seems to be steadily getting worse.

October 23rd.—Temperature 101·6°. Patient drowsy. The case was handed over, by Dr. Hebb, to me and I decided to explore the brain, with a view to possible cerebral trouble in connection with the ear mischief. The head having been shaved and rendered aseptic, chloroform was administered, and a large semi-lunar flap turned down from just behind the ear on the right side, and a large conical trephine applied to a point 1 inch behind the centre of the external auditory meatus and a little above its level. The skull cap was abnormally thick. On exposing the dura, it bulged into the trephine hole, and there was very evident intracranial tension; the dura also was much thickened; no tubercle was visible. The trephine hole exposed the lateral sinus, which was normal, and the temporo-sphenoidal lobe of the cerebrum above and the cerebellum below. These two regions were explored with a hollow needle in various directions, but no pus was discovered. The pia was also found to be thickened.

This exploration being negative, I trephined over the region of the fissure of Rolando on the right side, it being deemed possible that a tumour might be found there. The dura and pia were found particularly thickened in this region, and a greyish œdematous condition of the pia was well marked.

On examining the brain it felt very hard to the finger, and I thought that there might be a growth in its substance, so I incised the surface with a Horsley's brain knife; the brain cut hard but no definite tumour formation was discoverable. The wounds were therefore closed, a metal tube being inserted through the first trephine aperture into the lateral ventricle. Much cerebro-spinal fluid escaped through the tube. The latter was left in passing through the base of the scalp flap. The patient stood the operation well.

Patient next day seemed brighter, but soon afterwards became drowsy and died on October 25th, at 10.15 A.M., the temperature having risen to 104°.

At the post-mortem examination it was found, on removal of the petrous bones, that both membranes were perforated and the tympana filled with pus and grumous débris. The dura mater

was thickened throughout. The pia was also thickened over the cerebrum, especially over the parietal regions. The cerebrum weighed 19 ozs., and the cerebellum with the medulla, both of which were normal, 4½ ozs. The cortex of both parietal and occipital regions was much sclerosed and shrunken. The pia above was thickened and adherent. The rest of the cortex was fairly normal, though all the fissures were deep. The lateral ventricles were large and the ependyma thickened. Both middle fossæ were small and the bones rough and dark.

The symptoms in this case pointed to a possible diagnosis between cerebral tumour, cerebral abscess, or tubercular meningitis. It was evident the trouble was chronic, and from the symptoms, more likely to be due to meningitis than tumour or abscess.

At the same time I thought it wise to first explore in those neighbourhoods where intracranial mischief, due to suppurative middle ear disease, commonly occur; this examination being negative, I trephined over the right fissure of Rolando in the region of the arm and leg centres in search of a tumour, the symptoms pointing to irritation in that area on the right side. There being evidently considerable intracranial tension, I inserted a tube into the lateral ventricle to relieve pressure. I believe that in those cases where death is evidently imminent from compression of the brain, whether from cerebral tumour localised or general inflammation, an exploratory operation is perfectly justified, even if no tumour or abscess be found, as great relief may be afforded by incision of the dura, and in cases of meningitis from drainage of the lateral ventricles.

A CASE OF NECROSIS OF THE SUPERIOR MAXILLA.

By CHAS. W. GLASSINGTON, M.R.C.S., L.D.S. Ed.

E. L., aged 35, a postman, first came under my notice last September. His condition was as follows:—

His right cheek presented an inflamed and puffy appearance, with slight tenderness to the touch. On examining his mouth, I found on the right side the root of the first upper bicuspid and those of the first molar embedded in soft spongy gum, and the mouth generally in a very unhealthy condition.

The 12 year old molar was loose, and on moving it with the finger, the mucous membrane of a considerable portion of the jaw moved with it. There was also slight movement in the wisdom tooth beyond. The root of the second upper bicuspid had been recently removed.

The only history of the case one could gain, was that he first noticed a swelling on his face two years ago, and consulted a medical man, who "lanced an abscess on his gum" which gave him relief, and no further trouble occurred till a month before I saw him, when the face again became swollen and he had the root of the second bicuspid extracted.

There was no history of syphilis or injury.

I first extracted the three roots of first upper molar, which released some pent-up pus, and on passing up a probe felt bare bone all around. I prescribed an antiseptic mouth-wash and saw him every week for about a month, when I referred the case to a Surgical *confrère*, who kindly said it was one of those cases which was of equal interest to both the Dentist and the Surgeon, and if I would do what I thought was necessary, he would be pleased to give me the benefit of his advice later on.

Last month (under the administration of Nitrous Oxide Gas and Oxygen) I removed the loose second upper molar, and on passing up a probe felt several pieces of necrosed bone. A lot of fœtid

pus and blood flowed from the aperture and was passing down the patient's throat, so I ceased operating, brought his head forward, and waited till he regained consciousness. When the oral cavity had been thoroughly washed out, I easily removed the loose sequestra with a pair of upper root forceps. They consisted of three pieces about the size of the crown of a molar tooth. On further exploration with a probe, the floor of the Antrum was found not to be involved. I ordered a weak solution of Permanganate of Potash to be used as a mouth-wash, and have seen the patient several times since. The mouth has assumed a more healthy condition, but the gum has not closed yet, as small carious portions of bone occasionally come away.

The wisdom tooth still remains slightly loose, but not loose enough to warrant removal.

The chief points of interest in the case are as follows:—

1. The difficulty in tracing any cause for the disease.

2. The absence of any accompanying injury to the Antrum.

3. The interest of the case to both the Surgeon and Dentist, and the fact that it is one of those on the borderland of (if not over) the limitations of dental surgery, and but for the courtesy of my Surgical Colleague would have lost a large amount of its interest to the Dentist.

In the next volume of the Westminster Hospital Reports I trust I shall be able to furnish a satisfactory finale of the case.

AN ATTEMPT TO EXPLAIN THE PHENOMENON OF DELIQUESCENCE.

By H. WILSON HAKE.

Among the most common of ordinary chemical or physical phenomena must be reckoned that of the absorption of moisture from the air by so-called "deliquescent" or "hygroscopic" salts. Some time ago the subject attracted my interest, and after searching among books I came to the conclusion that it was one of those numerous phenomena which everybody accepts, and apparently understands, but which nobody seems quite able to explain. The older physicists put it down to a purely physical attraction or condensation, and both hair and chloride of calcium are classed together as hygroscopic substances. Leading chemical text-books define deliquescence as "the property which certain salts possess of attracting moisture from the air," and the rest is left to the imagination.

It is well known, however, that while certain salts attract moisture from the air, or "deliquesce," others yield up water to the air, or "effloresce"; and again, many salts when exposed to the air remain unaffected in any way; hence the purely physical explanation of deliquescence is untenable, and the "definition" found in chemical text-books leaves us *in statu quo.*

I made a few experiments in the first instance to see whether, among hygroscopic salts, any striking difference in degree of deliquescence existed, and whether it would be possible to determine and in some manner, possibly on a comparative scale, express the specific deliquescence of a salt. That a difference existed was clear from ordinary observation, and I found that some deliquescent salts, for example, ferric chloride, would deprive another deliquescent salt, such as cobalt nitrate, of its water of crystallization in an enclosed space, although both salts are ordinarily very hygroscopic; but no satisfactory conclusion

was arrived at until, quite recently, I again started some experiments on a somewhat different principle, viz., from a quantitative point of view. Known quantities of various deliquescent salts were exposed to the air and weighed at frequent intervals. It was immediately clear that some gained in weight far more rapidly than others, but what was especially striking was the fact that all attained a maximum weight in from two or three days to a week, and that from this point they steadily declined. In the majority of cases this maximum of deliquescence corresponded so closely to the amount of water required for the formation of a hydrate, that I have felt justified in suggesting an explanation of this term, deliquescence, as *a tendency on the part of certain salts and other chemical substances to form a definite hydrate.* For example: magnesium chloride with six molecules of water of crystallization reached a maximum corresponding exactly to eighteen molecules of water; sulphuric acid ceased to deliquesce after attaining a hydration equal to ten molecules of water; ferric chloride, starting with twelve molecules of water, stopped at thirty-six molecules; anhydrous lithium chloride attained a hydrate of eight molecules, and so on with many more. Although the results were not all theoretically perfect, so many were within the limit of error of experiment that I venture to hope my suggestion is correct, and that I may have fortunately hit upon the right explanation of deliquescence. I am still pursuing the investigation, having only published a brief preliminary note* on the subject, but I thought possibly the matter might, even in its present stage, possess some interest for the readers of these Reports.

* Proceedings of the Chemical Society, No. 160, 1896, p. 33.

SOME ANATOMICAL ABNORMALITIES WHICH HAVE BEEN OBSERVED IN THE DISSECTING ROOM DURING 1895 AND 1896.

By H. W. MARETT TIMS, M.D., F.Z.S.

During the past two years the number of subjects available for dissection in the anatomical department of this school has been 13. From such a comparatively small number it is impossible to give any statistical details which may be of definite value; nevertheless the number of abnormalities has been proportionately great, and in some instances of extreme interest.

It may be stated that the following details are taken from my own private notes, and were not made with any idea of publication, consequently they are not as complete as might be wished. It is, however, intended that in the future regular and detailed descriptions shall be made and kept in order that such report may be published in these volumes. The points to which especial attention has been paid are those suggested by the Collective Investigation Committee of the Anatomical Society.

Nerves.

The only abnormality worthy of mention that has been noted is the division of the great sciatic nerve as it emerges from the pelvis. It occurred once upon the left side in a female. One part, the external popliteal, pierced the pyriformis muscle, while the other portion passed entirely below the muscle. This condition is found in 12·3 per cent. of 138 observations. The whole nerve is found to emerge from the pelvis *below* the pyriformis in 85 per cent., and in only 2·2 per cent. was the *whole* nerve found to pierce that muscle.* It may be further stated that variations in this nerve are slightly more frequent in males than in females.

* Report of the Committee of Collective Investigation of the Anatomical Society of Great Britain and Ireland, 1895-6. By F. G. Parsons and A. Keith.

MUSCLES.

1. *The entire absence of the Pyramidales occurred in one male subject.*—This muscle is very largely developed in the monotremes and marsupials, and is in connection with the marsupial bones or epipubis. In some of the marsupials it is so large that it almost conceals the rectus abdominis. The attachments are given in the koala and wombat as follows* : "it arises from the inner edge of the marsupial bone and extends forwards and inwards towards the middle line, some fibres reaching the posterior segment of the meso-sternum and cartilage of the last true rib." This description I have found to hold good in the case of a fœtal macropus. Now the marsupial bones support the pouch; it seems to me therefore that in these animals the anterior attachment is more likely to be the fixed point; the longitudinal fibres arising more anteriorly would prevent the pouch from giving way ventrally, while the posterior oblique fibres would counteract any lateral displacement. The mammary glands being situated at the back of the pouch are compressed by the cremaster muscle which spreads over them.

The pyramidalis is absent in 17·1 per cent. of the males (human) that were examined, and in 20·1 females. When only one muscle persists it is usually the left.†

Wiedersheim‡ says of this muscle that it "claims our attention principally as a striking example of the tenacity with which certain structures remain in the organism and are handed on, through inheritance, long after they have lost their specific significance;" and again, "it is undoubtedly an old muscle dating far back to pre-mammalian times."

It is stated both by Chauveau§ and Lesbre‖ that this muscle does not exist in any of the domestic animals.

2. *A strong muscular slip about an inch in width passing between the lower border of the latissimus dorsi and the lower*

* Young, A. H.—"Muscular Anatomy of Koala." Journ. Anat. and Phys., vol. xvi.

† Report of the Committee of Collective Investigation of the Anatomical Society of Great Britain and Ireland, 1894-5. By Arthur Thomson, M.A., M.B., Professor of Anatomy in the University of Oxford.

‡ Wiedersheim—"Structure of Man." English translation, London, 1895.

§ Chauveau—"Anatomie Comparée des Animaux Domestiques." Paris, 1871.

‖ Lesbre—"Essai de Myologie Comparée de l'homme et des Mammifères Domestiques." Lyons, 1897.

border of the teres major.—This occurred on the right side only in a male. Three varieties of muscular slips from the lower border of the latissimus dorsi, close to its insertion, are to be met with.

(*a*) A slip passing to the pectoralis major and covering over the axillary vessels. These have frequently been noted, and such slips are usually supplied by a branch of the intercosto-humeral nerve.

(*b*) A slip contributing to the triceps, or being directly inserted into the olecranon process or inner condyle of the humerus. Such a slip represents the latissimo condyloideus or dorso-epitrochlearis muscle found in all anthropoids as well as in other mammals.

(*c*) A slip to the lower border of the teres major. I am not aware of any other recorded example of this abnormality in the human subject, nor do I know of any muscle in the lower animals of which this may be a representative. That these two muscles are closely applied is well known. F. G. Parsons* speaks of the border of the latissimus dorsi being folded round the teres major in some of the *hystricidæ;* and Chauveau,† in speaking of the latissimus dorsi, mentions that near its insertion "it receives fibres from the teres major" (p. 218).

(3) *An unusually well-marked tendon of the extensor indicis passing to the middle digit on the left side in a male.*—A tendon to the middle digit is said to occur in 14 per cent.‡ In many animals the tendon of this muscle forms part of the common extensor. Attention has only been paid to the presence of sesamoid bones in the gastrocnemius and peroneus longus during the past few weeks. Only two bodies have been examined as to this point. In one, there were none present; in the other, a bony one was present in the outer head of the gastrocnemius; and one, partly bone and partly cartilage, in the peroneus longus. These fabellæ are constantly present in the gastrocnemii of the dog and other animals.

Blood Vessels.

A. *Arteries.*—Two extremes have been noted in the origin of the radial artery.

* Parsons, F. G.—"On the Myology of the Sciuromorphine and Hystricomorphine Rodents." P. Z. S., Lond., 1895.

† Chauveau—"Anatomie Comparée des Animaux Domestiques." Paris, 1871.

‡ Quain's Anatomy. Edition, London.

(*a*) *Radial artery arising in the axilla.*—This was found on the right side only in a male.—This is stated to have occurred in 64 cases out of 481, or 13·3 per cent. In the present instance there was a transverse communicating branch between the radial and ulnar arteries immediately below the bend of the elbow, from which the radial recurrent and several muscular branches took their origin.

(*b*) *Bifurcation of the brachial artery* 2½ *inches below the elbow on the left side in a male.*—The posterior interosseous was given off ¼ inch above the point of bifurcation of the brachial, while the anterior interosseous came off from the ulnar. This unusually low bifurcation of the brachial artery was only once noted in 481 cases,* and in that one there was a vas aberrans from the axillary artery to the radial. No such vessel was present in this case.

B. *Veins. The inferior vena cava was found on the left side in its lower part.*—It was formed by the junction of the two common iliacs, but on the left side of the fifth lumbar vertebra. It received the left renal vein, and passing anteriorly to the aorta, ran upwards in its usual position. This probably represents the lower part of a persistent left cardinal vein. It is of interest on account of its great rarity.

Two pathological specimens have been met with, (i.) a well-marked vesical pouch, and (ii.) exostosis on the antero-lateral parts of two of the lumbar vertebra. Both of these have been handed over to the curator of the museum.

* Quain's Anatomy. Edition, London.

FLOATING OR MOBILE KIDNEY SUCCESSFULLY SECURED BY NEPHRORRAPHY.

NOTES AND REMARKS BY FREDERICK S. PALMER, M.D., FORMERLY H.S.

A. T—, æt. 35 years, an anæmic, delicate-looking little lady, whose health had never been satisfactory, consulted me in February, 1895, for gastric discomfort, nausea, constipation, flatulent distension, and intermittent abdominal pain of a severe character. In early life she had rickets, evidence of which I noticed in the shape of her chest, in enlargement of the epiphysial ends of the radii, and in convexity of the tibiæ and femora. In March, 1888 (7 years before she came under my observation), she had an ovariotomy performed by Mr. Bernard Pitts in St. Thomas's Home. Her recovery from the operation was a little tedious, but complete in every respect. When I saw her she was not obliged to wear any abdominal belt or support.

As her symptoms did not appear to yield to any of the remedies I prescribed, I persuaded her to allow me to make an examination of her abdomen. The first thing which attracted my attention was the cicatrix of the abdominal section, which appeared firm, and showed no signs of bulging. There was no apparent distension, nor any evidence of hernia. Pressure over the inguinal and femoral canals gave no impulse on coughing. When requested to indicate the seat of her discomfort, she at once referred the pain to the left lumbar and hypochondriac regions, which she described as a weight or dragging sensation, increased by movement or muscular exertion. Palpation over this spot detected a smooth, firm swelling the size and contour of the kidney. The tumour could be easily pushed forwards into the umbilical region, and upwards towards the epigastrium, but it could not be made to descend in the direction of the iliac fossa. Any manipulation of the swelling produced sharp pain and a sensation of nausea. When examined with one hand between

the last rib and the crest of the ilium, and the other on the front of the abdomen, the absence of the left kidney from its normal position, was clearly made out. The percussion note over the iliac region was resonant, and palpation detected nothing abnormal there. Her menstruation had been a little irregular since the ovariotomy as regards the intervals, and generally lasted only 2 or 3 days. She had never experienced the least difficulty or increased frequency in micturition. Her urine did not contain any traces of blood, albumen, or sugar. As I felt certain from the size, shape, and position of the tumour, in conjunction with her subjective symptoms, that I had to deal with a mobile kidney, I advised her to avoid all but very gentle exercise, to rest as much as possible, and to have her abdomen supported by a flannel belt and pad. Miss T. could not give me any definite idea of the date of the first indications of her trouble; but I gathered from her remarks she had experienced much discomfort for a very long time. I communicated the nature of the discovery to Mr. Pitts, and requested him to be so good as to refer to his notes, and to let me know whether any displacement of the left kidney was observed when she was under his care in St. Thomas's Home. In his reply to my letter Mr. Pitts said: "The ovariotomy was performed on March 16th, 1888; the left ovary was not removed, and nothing unusual was noticed in the position of the kidney." He concluded by very kindly offering to see Miss T. again, if I would send her up for examination. A few days afterwards, February 18th, Miss T. went to see Mr. Pitts who wrote to me the same evening to say that he agreed perfectly in the diagnosis. He recommended the palliative treatment by rest, and support should have a fair trial; and if those measures failed to give relief, it might be advisable to secure the kidney to the abdominal parietes. He added that he considered the case "to be a favourable one for stitching."

From that time until the middle of May I saw Miss T. at short intervals. She was unable to report any improvement in her symptoms, and complained bitterly of the life of inactivity to which she was condemned. The attacks of nephritic colic were nearly as frequent, and her general health became very unsatisfactory. Having placed before her the risks to which she would be exposed by surgical interference, and without

attempting to influence her judgment in the least, she elected to have the operation done, and requested me to make the necessary arrangements with Mr. Pitts for that purpose. The nephrorraphy was performed at Mortlake under strict antiseptic precautions on June 6th, 1895. An incision 5 inches long was made obliquely over the left lumbar region. The kidney was easily reached and exposed in a meso-nephron. The organ appeared to be perfectly healthy. The sac was sutured to the skin, subcutaneous tissue, muscles, and fasciæ with fine, strong silk gut. No sutures were inserted into the cortex or capsule. The upper and lower borders of the incision closed with stitches and the intermediate part sprinkled with iodoform, stuffed with double cyanide gauze, and left to granulate up. On looking back over my notes of the after treatment, the only facts I find worth recording are that she had no hæmaturia or urinary trouble. The highest temperature noted was 100·2° on the evening of June 9th. The upper and lower borders of the incision were united on June 13th, and the stitches removed. She exchanged her bed for the sofa on June 22nd; the plug was not disturbed until June 15th. In the afternoon of June 30th she was carried into the garden, where she remained on a couch for some hours, enjoying the sunshine and warmth of a lovely midsummer day. The granulation and cicatrization of the wound was complete on July 20th, or, in other words, forty-four days after the operation.

For many weeks afterwards Miss T. told me she felt a certain amount of numbness, smarting neuralgic pain, and sensation of tightness over the cicatrix. These discomforts have all disappeared now (August, 1896). Her mobile kidney is well secured to the side, and I have not since the nephrorraphy been called upon to attend her for any attack of nephritic colic. The latest intelligence which has reached me of her accomplishments is that she has become a victim to the fashionable craze of riding on two wheels, one of the many eccentricities of *le fin de siècle.*

Remarks.

The distinction between floating and movable kidneys is entirely an anatomical one. In the former the organs are enveloped in a mesenteric sac or duplicature—the meso-nephron,

which is congenital. In the latter, the renal ectopia is determined by the detachment of those slender arrangements with which nature has fixed them to the sides, in relation to the diaphragm, the aponeurosis of the transversalis, the quadratus lumborum, and psoas muscles, viz., the renal vessels, cellulo-adipose tissue, and chiefly the anterior reflection of the peritoneum. These dislocations may be congenital or acquired. So far as I can ascertain, there are no certain means of diagnosing this distinction by external abdominal examination. It therefore appears to me more convenient for clinical purposes to use the simple term mobile in speaking of both varieties, although Jenner says, "He would diagnose floating from movable kidney by the greater mobility of the former, due to its meso-nephron."*

"As to the symptoms of this ectopia, the truth is, that in the great majority of these cases there are none; that is the conclusion derived from Dr. Walther's researches."† Many, if not the majority of them, are discovered by accident, or escape detection until some special circumstances, arising from functional disturbance, or inconvenience occasioned by their pressure effects, calls attention to the subject.

We know these displacements are much more common in women than in men, and are more frequently observed on the right side than on the left, probably due, as Landau remarks, to the fact that "the splenic flexure of the colon is much more firmly attached than the hepatic.‡ However, to discuss the vexed question of ætiology would occupy more space than I have any right to ask for. My late friend Dr. Gueneau de Mussy, of Paris, has written an admirable paper on this subject in the *Union Médicale*, 1867. The diagnosis of Miss T.'s abdominal tumour did not present any serious difficulty. The size, shape, and position of the swelling, together with the absence of the left kidney from its normal situation, ascertained by bimanual examination, and the sickening pain produced by manipulation settled the matter at once. Her previous history of cystic trouble in the right ovary naturally caused me to consider whether it might possibly be a similar formation on the left side with an unusually long pedicle rising high up into the abdomen.

* Diseases of the Kidneys, Ralfe, page 391.

† Trousseau's Clinical Medicine, New Sydenham Society, vol. v., p. 408.

‡ Landau's Clinical Monograph, Die Wanderniere de Frauen, 1881.

The absence of dulness in the inguinal region, and the fact that the tumour could not be pushed down in that direction, negatived the suggestion.

In my experience of practice, extending now over a period of 25 years, I have come across a few cases of mobile kidney, but I have never before seen one in which the symptoms were so distressing, and the inconvenience so great as to justify, or even suggest, surgical interference.

The usual treatment of rest and support of the abdominal walls has been sufficient to restrain the wandering of the organ, and any symptoms of strangulation of the ureta relieved by the application of warmth with a full dose of opium. There are many forms of trusses and belts designed to retain the kidney in its normal position; but like the so-called colotomy cups, invented for use after inguinal colotomy, nothing seems to answer better than a well-applied flannel bandage with a pad of cotton wool provided with shoulder straps to keep it in position.

The operation of nephrorraphy, first performed by Dr. E. Hahn, of Berlin, and in this country by Dr. Newman, of Glasgow, appears to have been followed by very successful results. Hahn's two first cases were published in the *Centralblatt für Chirurgia* for July 23rd, 1881. Newman's in the *Glasgow Medical Journal* for March, 1883. Mr. Henry Morris, writing in 1885, says: "Nephrorraphy hitherto has not been marred by a single fatal result."* Newman, 3 years later, records 23 cases with one death.† Mr. Bruce Clarke gives a series of 30 cases of movable kidney treated by operation with their results in his interesting paper read at the Medical Society last year.‡ As a hopeful and comparatively safe alternative to a life of permanent invalidism, uselessness, and suffering, I should not hesitate to recommend the operation in cases of mobile kidney, accompanied by frequent severe attacks of nephritic colic, in which the general health appeared to be otherwise satisfactory, and the bandage failed to give relief.

Beyond the diagnosis, rendering some assistance at the operation, and the responsibility of the after treatment, I cannot claim any share in Miss T.'s improved state of health. That

* Surgical Diseases of the Kidney, p. 44, Henry Morris.

† Lectures to Practitioners on the Surgical Diseases of the Kidney, Newman.

‡ The Medical Society's Transactions, vol. xviii., p. 277.

satisfactory result has been obtained by the remarkable courage of the patient, who faced the alternative with every confidence in the skill of the surgeon and the success of the measure. The case illustrates the progress of abdominal surgery, and as a comparatively modern operation is worthy of record. *Avec deux larges cicatrises sur le ventre, blessures honorables,* I think Miss T. has fairly earned the title of a new surgical woman. In that distinguished position, and also in the hope that she may never again have to submit herself to the art of surgery, I trust many happy years of usefulness are before her.

CASE OF EXTENSIVE CONGENITAL AND ACQUIRED HEART DISEASE.

By REGINALD NITCH-SMITH, L.R.C.P., M.R.C.S.

THE following interesting case occurred while, as House Physician, I had charge of Dr. de Havilland Hall's wards at Westminster Hospital, and by whose permission I now publish the case.

The clinical history was as follows: Florence T—, æt. 18, domestic servant, transferred from the Gynæcological to the Medical Wards under Dr. de Havilland Hall. When the patient was admitted she complained of pain all down the left side, which has been present on and off for the last 4 months. *History of present illness.*—About 4 months ago patient was suddenly seized with pain in the left side, but was able to keep at work. The pain was severe for a few days, and then disappeared. She had no recurrence till 19th December, 1895, when pain again came on suddenly, and worse than before. Patient had to give up work, and the following day came to Westminster Hospital. *Previous history.*—Broncho-pneumonia at age of 6. Scarlatina 2½ years ago. No history of rheumatism. Family history: Mother died of phthisis, æt. 32. Father and brother alive and healthy. External characters: Patient is very anæmic; conjunctiva pale, complexion sallow, slight emaciation; temperature varying, yesterday 102·8°, to-day 98·2°. Circulatory system: Pulse 112, full, quick, and soft. Venous pulsation in vessels of neck; thrill felt at base and apex of heart; there is a mitral systolic murmur, best heard at apex, and conducted to the right of sternum. C.D. extends to about 1 inch to right of sternum; upper limit of C.D. upper part of 2nd intercostal space; apex beat, 5th interspace, internal to nipple. There is a systolic murmur at base, best heard over pulmonary area; the murmur is conducted upwards to the clavicle. A very

rough diastolic bruit is heard all along the sternum. On some occasions a presystolic murmur was heard at apex. Respiratory system: "Nil." On examining the abdomen the spleen was found to be enlarged. Generative system: has never menstruated. Urinary system: "Nil." *January 14th.*—Red corpuscles 144, white 2. It was found that the white corpuscles were not increased, but the red diminished to under half. *February 14th.*—Patient was out yesterday, feels better; thrill more pronounced; red corpuscles 167, white 2. Blood when drawn off is venous in colour. *February 20th.*—Patient does not feel well to-day; she complains of pain in left hypochondrium. Spleen is larger; extreme tenderness on pressure; appetite bad; pulse 96. The temperature during the patient's stay in the Hospital ranged between 97° and 103°; when she left the Hospital, 29th February, 1896, it was 99·2°, ascending. It was noticed that when the temperature was high there was usually pain in splenic region. On leaving the Hospital the patient went to the convalescent home at Swanley. I shall now give, *verbatim*, the mother's report of what took place, from the time of the patient's arrival in town till the time of her death. I do not apologise for so doing, as I think the importance of the observation justifies the lengthy description:—

"I was waiting at the Elephant and Castle Railway Station for my daughter, but she was carried past the station to St. Paul's, and she returned to the former station by 'bus in company with two other patients. They walked from the 'bus into the station. Her face looked blue and swollen. She was breathing quickly, and had to lean heavily on me till we reached home, about a quarter of a mile from the station. She was very excited on account of passing the station where I was waiting, the door of the railway carriage being locked. She had some broth and a little meat and bread and then laid on the bed, complaining of a slight pain in the heart. She afterwards sat up in a chair and told us all about the convalescent home. She later on had some bread and tea with a little watercress, and went to bed; had a good night's sleep; cocoa and egg for breakfast; for dinner she had a little fish, bread, and stout; sat up, and occasionally laid down on the bed during the day; tea, bread and butter, and a little greens, then went to bed and slept fairly well, coughed now and then.

"On Saturday (day before death) she had cocoa and toast for breakfast; bacon, greens, and bread for dinner; tea as usual. She complains of pain in the heart, and her breathing is short, but she is able to get about the room. Her previous pale look had returned by this time. On going to bed this evening she did not feel quite so well, and passed a restless night.

"*Sunday, 5th April,* 9.30.—Breakfast—tea, bread and butter, and watercress; soon after she asked to be lifted into my bed. She then looked to me as if she was 'struck for death.' I placed her in bed and propped her up with pillows. I then called up a friend and went for a doctor at a dispensary. He did not come at once, so I went to the Relieving Officer, who gave me an order, which my husband took to the parish doctor, but he did not come till late in the evening. During the time I was away she had had some milk to drink. She said she was feeling cold, and asked some one to close the door. By what follows, the dissolution was not long in coming. She then asked me to come to her bedside, and wanted to know whether she was dying? I said, 'Yes, my girl, you are.' The child then asked to be kissed and said, 'You have been a kind mother to me,' when suddenly she turned deathly white, and giving a short, sharp, sighing cry, fell back dead in my arms at half-past twelve." A medical man arrived on the scene five minutes later and pronounced life extinct. The mother informed me that on the morning of the girl's death she menstruated (?) for the first time.

Post-mortem examination made 69 hours after death on April 5th, 1896. Body well nourished. Skin of abdomen greenish. Post-mortem lividity of general surface of body. Purpuric spots on lower extremities. Rigor mortis passed off. Thoracic cavity. Lungs, 19 and 21 ounces. In condition of cardiac congestion. Some pleural adhesions of left lung to thorax. *Heart.*—17 ounces. Shape globose; in diastole. Contents, fluid blood and soft decolorised clot in the ventricles (post-mortem coagulation). Left ventricle dilated; walls thin, about half an inch. Right side of heart: Only two cusps to pulmonary artery; they are both thickened; one is slightly recurved and has vegetations on upper border. About the middle of the anterior wall of right ventricle there is a patch of endocarditis about the size of a florin, covered with recent

vegetations. There are also recent vegetations on the flaps of tricuspid valve. In the "pars membranacea," at the base of the septum, there is a funnel-shaped aperture about the size of a goose quill; this opening places the two ventricles in communication, the condition just described being a congenitally defective interventricular septum. *Aortic orifice.*—Here also there are only two cusps, both thickened and recurved. On one there is a mass of vegetation size of an almond; the other cusp is also covered with vegetations, and in this cusp there is a ragged hole about the size of a threepenny piece, of recent origin; the dislodged slough could not be found. There are numerous coarse vegetations on the ventricular aspect of the large flap of mitral valve, the auricular surface being quite normal.

Spleen.—22 ounces. Dark, firm. On the surface are several infarcts, one large yellow mass size of a walnut, and five smaller ones about size of peas. *Brain.*—40½ ounces. Soft and pallid, otherwise normal. *Kidneys.*—7½ and 6½ ounces. Dark purple, firm, full of blood, otherwise nil. *Generative organs.*—Normal. *Stomach.*—Somewhat dilated, containing greenish fluid and coagulated milk; mucosa normal, except post-mortem decoloration.

Cause of death.—Rupture of aortic valve. Acute ulcerative endocarditis. Previous endocarditis and congenital morbus cordis.

Commentary.

From the history of the case, and its ultimate termination and the discoveries made at the autopsy, it will be seen that it is a remarkable one. The rarity of the combined multiple lesions in the great motor power of the vascular system and its compatibility with life, up to a certain unforeseen and unexpected rupture in an organism which at all times was being carried on under a breaking strain, makes the case almost unique. The varied literature on the subject with which I have become acquainted fails to supply an analogous case. In no instance can I trace a case where the pulmonary and aortic cusps, the tricuspid, and the ventricular aspect of the mitral valve were infected, although frequent cases are recorded in which the aortic and auricular surface of the mitral valves were ulcerated.

The nearest approach to it is one described by Dr. Sansom in *Disease of the Heart and Aorta*, p. 328.

The symptoms, or the want of symptoms, were exceptional; contrary to the usual cyanotic state, the patient was very pale and anæmic, and, as in most cases described, the catamenia were absent till just before death. There was no clubbing of the fingers or toes. There was absence of rigors, nervous or pyæmic symptoms, or any grave constitutional disturbance, in fact, nothing but the intermittent fever and splenic tenderness to warn us that the patient was being microbically infected. The temperature was an important diagnostic point, and it will have been seen in a previous statement that it was very irregular, ranging between 98° and 103°. This I think should have aroused our suspicion that there was at the time some divergence from the normal line of health, especially if we remember that the most usual condition of a patient with congenital defects of the heart is a temperature slightly subnormal, with subjective sensations of cold. A fact noticeable in this case was that it was not of the "typhoid type," which Dr. Osler thinks is the most common, and Dr. Sansom says, "The features differentiating the disease (septic from simple aortic valve inflammation) are the extreme prostration of the patient, alternation of very high and very low temperature, signs of embolism in various organs and plugging of cerebral arteries, with implication of the brain." In the present case there was no prostration, but the temperature did vary, and there were emboli in spleen, not brain.

I quote the above authorities to show the remarkable contrary features of this particular case compared to others which had come under the notice of more able observers.

These multiple defects, occurring in a heart, clearly shows that it must be a developmental error. The thickening and recurving of the pulmonary and aortic cusps, before mentioned as being found post-mortem, was in my opinion due to intra-uterine inflammation, and that the fresh vegetations were of recent origin. It is well known that most intra-uterine affections attack the right heart; this is no doubt due to the excess of work done by this side of the heart compared to the left. Dr. Carpenter, in his admirable work *Congenital Affections of the Heart*, says, "that the errors in development are more

common on the right side," and "of all congenital affections of the heart, those which attack the pulmonary valves, the artery or its orifice is the most common; generally the number of the valves is defective." Associated with this is usually a perforate septum ventriculorum, &c.

The causes of the latter defect are numerous, but in most cases it will be found that it is compensatory to an inadequate exit for the blood from the ventricles.

All perforations in the septum do not necessarily mean congenital defects. It has been proved that in several instances it is the result of disease in early life, but when, as in the present pathological specimen, other defects as I have just described are found in the pulmonary and aortic openings, there is no doubt left in my mind that the condition was one of congenital anomaly.

It is interesting to state here, on the authority of Dr. Byron Bramwell, "That stenosis of pulmonary orifice caused by disease before the third month of fœtal life will result in patent interventricular septum."

On commenting on the active process which was going on in the malformed and previously diseased organ, I regret that up to the present we have not been able to successfully combat this aptly named malignant ulceration of the heart. I am in hopes that some antiseptic agent will yet be discovered which, without harm to the patient, could be injected directly into the blood stream, and thus reach the ulcerating surface, causing death and destruction to the invading micro-organisms.

There is no doubt, as Dr. Peacock first clearly pointed out in his Croomian Lecture at the Royal College of Physicians, 1865, that in the congenitally damaged valves there is a proneness for future attacks of simple or infective endocarditis. Dr. Carpenter says, "Ulcerative endocarditis in adults, a most unusual occurrence, may attack the pulmonary valves. The associated pulmonary symptoms and the fever would point to the nature of the disease." I am sorry to say in this case there were no pulmonary symptoms to draw our attention to the grave disorder.

According to the Great Ormond Street Children's Hospital records, only 1 case of ulcerative endocarditis occurred in 20 years. Dr. Carpenter states "that in his experience the affection

is not so uncommon," but adds "that he has never seen a case in childhood involving the pulmonary artery."

I am of opinion that ulcerative endocarditis is not so uncommon as records would lead one to suppose. I was practically cognisant of 3 cases within the last 9 months; they were verified post-mortem and perhaps a few that were not.

In contradistinction to the cases which have been recorded, where the ulceration occurred in the left side of the heart, the present case was both right and left sided, the ulceration and vegetations were found on the pulmonary valves and in right ventricle, also aortic and mitral valve, ventricular aspect. A point of pathological interest is the position of the intraventricular infected areas. "When there is no source of obstruction at the right side, so that the right and left ventricles retain their normal proportions, the flow of blood is from the left ventricle, and the opening in the defective septum is usually larger on the left ventricular aspect," but here we have a thin-walled left ventricle with areas of endocardium affected, the localisation of which makes it probable that the infected blood had travelled in either direction. The question arises in my mind, Did the heart's action, after the patient left the Hospital, become irregular, and so produce asynchronism in the action of the two ventricles, thus allowing at one moment blood to be propelled against the tricuspid and right ventricular wall and at the next against the mitral flap, ventricular aspect?

A question which has caused me grave consideration, bearing in mind the history, is what connection had the attack of scarlet fever with the acute ulcerative. Was the scarlet fever which the patient contracted 2½ years before the cause of a latent poison in the blood, or micrococci, such as the streptococcus or staphylococcus described by Dr. Klein, as the cause of the former disease, having remained encysted in one of the many structures which may become affected in scarlatina, and after months of inertness, rekindled to life and set free in the blood stream and attaching itself to a diseased but fruitful soil—the lining membrane of the heart?

Dr. Dreschfeld, of Manchester, in an interesting paper read before the British Medical Association, on the "Etiology of Malignant Endocarditis," refers to the variety of micro-organisms found in this disease and says, "Of the organisms found, some

did not occur in other affections, others were well known microbes, such as the staphylococci, streptococci, pneumo-cocci. In some rare cases the typhoid bacillus, the bacillus of tuberculosis, diphtheria, and gonococcus, had been found." We cannot shut our eyes to the fact that there must be a variety of innocent or potent factors at work when we observe such varied results in the ulceration and constitutional effects.

The fatal and lamentable termination must have taken place immediately after the dislodgment of the vegetation, in the form of an embolus and concomitant rupture of the aortic cusp. It was at this critical moment that the already diminished quantity of blood was being ejected from the heart into the main channel to supply the ultimate radicals in the brain, was returned into the left ventricle through the pathological opening in the aortic cusp, and thus producing a fatal anæmia of the brain, in which all life-giving impulses are generated. It is, and has been, a point of extreme regret that at the autopsy I was unable to ascertain the exact position of the vegetation which had been carried away in the blood stream.

Before concluding this report, the intricate questions of which time and space prevents my discussing more fully, I must draw your attention to the age at which the patient died, showing how extensive heart disease is compatible with life. The question is, Would this patient have lived to the age of her mother, had not the malignant endocarditis caused her untimely end?

How very exceptional this case is when it helps to prove the rule expounded in nearly all treatises on the subject of congenital heart malformations, "That the patient dies very young."

CASE OF PALSY OF THE LEFT LOWER LIMB IN AN ADULT.

By J. R. LONG.

George Reid, æt. 49, a bricklayer, was admitted into King William Ward under Dr. Donkin on December 9th, 1896. On admission he complained of loss of power in the left thigh, leg, and foot. There was nothing of importance in the family history. There was no history of alcohol or syphilis in the past life of the patient, who, with the exception of "putting his knee out" 20 years ago, had always had good health.

Twelve weeks before admission patient slipped down some steps and fell with his left foot strongly extended under him. For 14 days afterwards he was laid up with a "sprain" and with pain in the ankle and over the dorsum of the foot. A few days after resuming work he found that towards the evening his left foot used to swell slightly, but the swelling was never very pronounced. He also noticed weakness in the left foot and leg. This increased rapidly, and he had to cease work 8 days before being admitted. There has never been any pain since he began to get about again after the accident, except that lately he has had severe "cramps" in the left leg.

On examination it was found that the left thigh and leg were markedly smaller than the right. The muscles of the thigh were extremely atrophied and flabby, but those of the calf were, although very much atrophied, firm. Sensation was perfectly good all over. The patient could flex his leg on the thigh at will quite easily. The left foot was dropped and the patient could not raise or move it at all. The skin over the knee and the dorsum of the foot was purplish. There was no loss of the gluteal fold on the left side. Patient could walk fairly well, but had to lift his leg high up in order that the foot might clear the ground. He complained of some pain shooting down into the fourth toe of the left foot. The toe appeared to have been

dislocated backwards, but patient said that it was always so. The right posterior tibial and the right dorsalis pedis arteries could easily be felt to pulsate, but neither vessel could be detected in the left foot. The length of the legs was equal (34½). There were no swellings anywhere. No rectal or vesical trouble. There was no pain down the spine. The knee-jerk was normal on the right side, but quite absent on the left. In other respects his general health was very good in every way. The electrical reactions obtained were as follows: The muscles of the right leg reacted normally; those of left leg reacted hardly at all to faradism, but fairly well—about the same as on the right side—to galvanism; contraction was slow and long continued; ACC was greater than KCC; there was well-marked reaction of degeneration in the muscles of the left buttock and thigh, as well as in those of the leg. The temperature of the left lower limb was lower than that of the right, and it was distinctly cooler to the feel. There was venous marbling of the cutaneous surface of the left foot.

Since admission, he has been massaged for a quarter of an hour three times a day. For the first fortnight he did not seem to improve much, but during the last week the left leg has become both larger and stronger, and the thigh seems firmer also. The patient says it feels very much stronger. He cannot raise the foot, but he can move it fairly easily from side to side, and can now flex the great toe slightly.

In spite of the above-described condition of the left lower extremity having set in so soon after the accident, there would seem to be no causal connection here, unless indeed there had been some degree of unnoticed foot-drop previous and conducive to the fall with the foot bent backwards as related. The only lesions which are suggested by the state of the limb are an anterior polio-myelitis on the left side of the cord in the lumbar region and a peripheral neuritis. The apparently sudden onset and rapid development of the affection favours the former view, but it is to be remarked that an anterior polio-myelitis of so definitely limited a nature is at least infinitely rare in an adult, and the hypothesis of a hæmorrhage into the anterior cornu is but a last resort. Against the possible view of a peripheral neuritis is the absence of evidence of affected sensibility, and, perhaps, the very rapid progress of the symptoms.

CASE OF PARAPLEGIA.

By E. B. SHERLOCK.

The subject of this report, W— P—, an omnibus driver, 41 years of age, was a well-developed man free from obvious physical defect and of good family history. Previous to the illness of W— P—, of which an account is here given, his health had been, in general, good, and he had not been addicted to alcohol. In 1890 he suffered from tonsillitis together with some affection of the knees and ankles; in 1891 he had sores on the penis, and in 1894 an attack of syphilis. As possible determining causes of his symptoms he spoke of having been crushed between two horses in May, 1896, and of getting very wet three weeks before his admission to the Hospital.

About the 7th July, 1896, patient began to be troubled with difficulty in walking. He felt as though he had no power over his legs, his knees would give way, and his feet were dragged along with the soles touching the ground: this condition was more marked on the left side. He had headache in the frontal and temporal regions. At the same time he noticed increased frequency of urination, and by the 13th he had lost the power of emptying his bladder, and had to have his urine drawn off by means of a catheter. On the 14th he fell down suddenly, and when raised to his feet was quite unable to walk. He was therefore brought to the Hospital, where he was admitted under the care of Mr. Bond, who, at the end of a week, transferred him to Dr. Donkin and Dr. Hebb. On examination the following condition of things was found to obtain. There was inability to move the legs voluntarily, associated with cramp and involuntary movements especially on the left side. Sensation was so modified in both limbs, as high as the groin, that a prick felt like a touch, while mere contact of a body with the skin, or variations of temperature in the testing appliance, could not be detected. The sense of position of the limb was unaffected and

the patellar reflex was present on both sides. There was no priapism, no girdle or lumbar pain, and the headache and pains in the legs subsided until after the exacerbation of the symptoms shortly to be described.

A slight degree of cystitis was present from the time of admission. For the first few days the urine was of low specific gravity and alkaline, and contained a little blood and pus. Under treatment by washing out the bladder daily with an aqueous solution of benzoic acid (ʒi ad Oi) the urine became acid in the course of a fortnight, and remained so for about three weeks, when alkalinity, and later a little pus with a deposit of phosphates, was observed. Ac. benzoic in doses increased until grs. xx. t.d.s. were taken, was without effect, and ac. sulph. aromat. ♈ xxx. t.d.s. proved equally useless. The employment of a catheter was discontinued at the end of September.

On admission patient had a temperature of 101°, rising by the 3rd day to 102·8°, after which, for a fortnight, it departed little from the normal. During the 30th and 31st of July however it gradually rose to 103°, the rise being accompanied by a rigor, vomiting, the passing of a loose motion containing blood, and the onset of pains which persisted more or less until patient was discharged; the pulse was irregular and intermittent, and its rate reached 150. The pain was most marked in the left iliac region, where there was tenderness, and in the hypogastric region. A feeling of constriction about the lower part of the trunk, which lasted until August 6th, was also present. There was occasional vomiting during the next 4 days, but the temperature soon fell again to normal. Diarrhœa set in, and it was now found that there was loss of control over the rectum, the motions being passed involuntarily, and at first without patient's knowledge. An examination of the rectum showed it to be large, with velvety hot mucosa and complete relaxation of the anal sphincters. In order to dispose of this aspect of the case it may here be noted that the diarrhœa, with occasional passage of blood, continued until September 8th, the sphincter meanwhile regaining its normal tone, and that afterwards there was some degree of constipation lasting until patient's discharge.

Notwithstanding the intercurrent febrile attack the condition of the patient's nervous system, on its sensory side, continued steadily to improve from the date of his admission. Thus on

August 4th it was observed that a touch could be exactly localised upon either leg, but there was still diminished sensibility as regards pain and variations in temperature. On October 20th no defect of sensation could be detected in either leg.

The motor functions were, however, more seriously affected. For some time patient could not voluntarily move the legs, but spasmodic movements were set up by handling them, or by the pressure of the bed-clothes. The condition at the beginning of September may be thus described: At intervals of a few minutes the legs were, involuntarily and slowly, partially flexed, complete flexion being then effected by a rapid movement; the patient could immediately straighten the legs, experiencing at the same time severe pain in both iliac and inguinal regions. By October 16th patient could stand alone, and even walk a short distance with assistance, but both limbs exhibited clonic spasms when extended. These shortly afterwards ceased and the power of using the limbs gradually improved.

An investigation of the electrical reactions of the muscles showed that in both legs these responded to the faradic current, and that except in the case of the muscles of the front of the right leg, where A C C was nearly equal to K C C, the reaction to the galvanic current was of a normal character. Later, when patient had so far recovered as to be able to stand, it was found that while the right leg muscles were normal there was diminished reaction to both faradism and galvanism on the left side, though the contractions induced by the galvanic current were normal in character.

Excepting a slight degree of wasting of the leg muscles, especially at the left side, no trophic changes occurred during the patient's illness. The patellar reflex was throughout somewhat exaggerated on both sides, and ankle clonus could be elicited more easily on the right side; the other reflexes were normal.

During the latter part of his stay in the Hospital patient had aching pains in the loins. Up to the time of his discharge on Nov. 11th he had not completely recovered control over his bladder, involuntary urination taking place at intervals of about an hour, and he was therefore supplied with a urinal. In view of the possibility that the disease might be of syphilitic

origin he was for some time given liq. hydrarg. perchlor. ℥ xxx. and pot. iodid. grs. v. t.d.s. Later, stimulation of the affected muscles with the faradic current and massage were employed. The amelioration of the patient's condition did not however appear to be directly traceable to either of these courses of treatment.

When last seen on December 19th, 1896, patient was able to walk much better than when he left the Hospital, and the evidence of wasting had disappeared from the legs, but the urinal was still required, and there was still constipation.

In attempting to elucidate the pathological condition giving rise to the above-mentioned symptoms, attention may be especially directed to the following features of the case:—The rise of temperature; vomiting, and passage of blood per rectum; cystitis; pain in the limbs unaccompanied by tenderness along the course of the nerves, except in the left iliac fossa and upper part of the thigh; impairment of motion and, to a less degree, of sensation; and, finally, the small amount of trophic disturbance. These phenomena seem most easily explicable on the supposition that there was an inflammatory process affecting the lower part of the spinal cord and, to some extent, the adjacent meninges. The improvement which took place indicates the absence of extensive disorganisation in the cord, though probably both grey and white matter were injured. On the whole the most rational hypothesis appears to be the occurrence of hyperæmia with exudation and softening, especially in the external parts of the cord on the left side, and the fact that patient's progress towards recovery has apparently, in some directions, reached its limits is in accordance with the view of a slight permanent lesion of some such character as this. The pain and tenderness in the left iliac fossa were thought at one time to point to a neuritis spreading up to the cord, but the subsidence of the symptoms renders it probable that they were due either to a descending neuritis or to hyperæmia of the sigmoid flexure.

As to the exciting cause of the disease no satisfactory suggestion can be made.

Antisyphilitic remedies produced so little effect that their use was not persisted in, and the case for a specific origin can hardly be considered to be made out in spite of patient's previous

history. Little importance attaches also to the slight injury received in May, 1896, information in regard to which was only elicited by leading questions.

Since the treatment adopted was mainly palliative its share in averting a fatal issue was probably small, but this fact only serves to bring into prominence the conclusion that no case of myelitis involving the lower half of the cord need be despaired of even when the symptoms are grave and urgent.

CASES OF INTEREST IN THE MEDICAL WARDS DURING 1895 AND 1896.

By J. P. PARKINSON, M.D., *Medical Registrar.*

1.—ACUTE SPECIFIC FEVERS.

Enteric Fever.

The statistics of the cases of enteric fever aidmtted into the Hospital during 1896 will be found in the usual place.

There were admitted during the first week of the disease 2 cases, during the second week 24 cases, while the remainder were admitted in the course of the third week. The onset was gradual in all the cases except in one, in which the disease appeared to begin with an acute pneumonic consolidation of the lung. The eruption was abundant in 6 cases, about the usual amount in 25, and in 3 was said to be absent. The bowels were confined in 18 cases, loose and frequent in 14, while in the rest they were irregular, as a rule beginning with diarrhœa and then constipation coming on. The spleen was palpable in 10 cases, and was enlarged to percussion, though not felt, in 16 cases, while in 6 cases it was never noted larger than normal. The tongue was characteristic in 27 cases, while in 1 case it appeared fairly normal throughout. The typhoid aspect was noted in 22 cases. Vomiting was marked in the first week in 7 cases. Headache was severe in 21 cases, while 5 had epistaxis, and 2 had severe sore throat. The abdomen was markedly distended in 24 cases, in 15 of which it was exceedingly tender.

Complications.—Three cases had severe bronchitis, and 1 had a consolidation of the base of the right lung. There was dry pleurisy in 4 cases; 1 case developed endocarditis; 7 cases had very severe delirium, and 1 was maniacal; 1 case had otitis media, for which an operation was successfully performed; 1 case had double femoral thrombosis; in 1 case the pulse was over 140 for several days, and 1 case had fever over 105° during 3 days, it however recovered.

During convalescence one woman developed much deep tenderness in the legs with loss of motor power; at the same time there was difficulty and delay in micturition, the knee-jerks became excessive and ankle clonus appeared. The legs occasionally twitched spontaneously and wasted rapidly for some weeks; later, these troubles all improved, and when the patient was discharged the legs were fairly normal. Sensation was unaffected throughout.

2.—A CASE OF VACCINIA.

Kathleen S—, æt. 10 months, was admitted under Dr. Allchin, September 17th, 1896. She was the younger of two healthy children, had been suckled till two months ago, and had had no previous illness. She was vaccinated on September 1st, and on the 9th a rash appeared round a single vaccination pustule. On admission there was a pustular eruption over the left shoulder, surrounded by a continuous inflamed area extending slightly down over the upper arm; the axillary glands were enlarged and tender. The child was somewhat thin, and had had for a fortnight diarrhœa with yellow offensive motions. The child continued to have diarrhœa and to waste rapidly, though no fresh pustules appeared, except one large one on the right occipital region which required incision. On September 24th a brawny swelling appeared on the outside of the right thigh and gluteal region, this was incised and much pus removed; the wound continued to suppurate freely, and on September 28th fresh pustules appeared at the side of the nose, angle of the mouth, and right lumbar region. The child was obviously weaker, with a pulse of 148, and it died the following day. The temperature was practically normal except just before the abscesses were opened, when it mounted once to 102°.

For autopsy, see P. M. report, 1896, No. 352.

3.—DISEASES OF THE NERVOUS SYSTEM.

Cases of Cerebral Softening.

Case 1.—Annie B—, æt. 37, married, was admitted under Dr. Allchin, April 21st, 1896. She had a healthy family and

personal history, with the exception of several miscarriages in the early months of pregnancy, apparently not due to syphilis, of which there was no history or evidence. On April 17th, on rising from bed she staggered and fell, and became unconscious for about ½ hour, and on recovering she was unable to speak, and there was complete loss of power on the right side. On admission she was drowsy and apathetic, understood spoken and written language, but could not express herself. There was paralysis of motion of the right arm, leg, and the right side of the face, but sensation appeared normal; the pupils were equal, and there was no ocular paralysis; the tongue could not be protruded well to the right side; deep reflexes somewhat increased on the right side. The pulse was small, frequent, and soft; the limits of deep cardiac dulness appeared normal, but there were presystolic and systolic murmurs at the apex of the heart, and a systolic murmur at the right base conducted towards the clavicle. No obvious signs of arterial degeneration. The lungs appeared normal. The temperature varied between 99° and 101° each day. The urine contained neither albumen nor sugar. She remained in much the same condition till May 4th, when there was temporary sensory aphasia as well as motor; this improved in the course of a few days. She wasted and got very depressed and emotional. On May 30th, it was noticed she could not pick out letters correctly, and gave them wrong names. Early in June she began to suffer from headache, and the temperature rose irregularly to 102° or 103°; she got more drowsy and weaker. This condition lasted till July 4th, when she suddenly began to vomit continuously, and she died on the evening of that day. The temperature at death descended to 96·2°.

For autopsy, see P. M. report, 1896, No. 301.

CASE 2.—Mary A. B—, æt. 62, was admitted under Dr. Allchin, on July 10th, 1896, with hemiplegia of the right side. She was found in her room conscious but unable to speak, and paralysed. No history could be obtained. On admission she had complete paralysis of the right arm, leg, and right side of the face, with motor aphasia, and blindness of the right eye. No loss of sensation. The pulse was 72, irregular in force and rhythm, with a hard and tortuous artery; the heart was dilated,

and the apex beat in the 5th space outside the nipple. There was an indistinct systolic murmur at the apex, and the second sound was reduplicated in the 3rd left intercostal space. There were some bronchitic sounds at the bases of the lungs. Urine normal. Temperature varied from 98·4° to 100°. She remained in about the same condition till July 19th, when she suddenly got worse. There was no convulsion, but she became unconscious, with Cheyne-Stokes breathing and total paralysis of all four extremities. There was no stertor, and the pupils were equal and of normal size. The temperature on July 20th mounted to 104°, and she died at 4 a.m., July 21st.

For autopsy, see P. M. report, 1896, No. 309.

A Case of Cerebro-spinal Meningitis with Ulcerative Endocarditis and Empyema.—Death.

T. N—, a brewer's labourer, æt. 45, was admitted under Dr. Allchin, April 25th, 1895, complaining of weakness and cough. His family history was good, except that two sisters had died of phthisis. He was a married man who had no history of syphilis, but had had two operations for anal fistula. He had winter cough the past 5 winters, and slight hæmoptysis 5 years ago. He drinks 3 or 4 pints of beer a day. He was quite well till April 23rd, when he had pains in both legs and in the front and right side of the chest, with pains all over. He had a rigor, and since has suffered from much dyspnœa. On admission he was well nourished, not anæmic. Respirations 40, shallow and laboured, with much working of alæ nasi and extraordinary muscles of respiration. Pulse 140, regular, quick, rather compressible. Arteries not hard. Temperature 102°. In the chest there was dulness, increased vocal fremitus and voice sounds with tubular breathing at the right apex down to the 2nd rib. Fine crepitations all over right front of chest, and rhonchi all over left front. Behind, dulness; increased fremitus and tubular breathing with crepitations down to the angle of the right scapula; elsewhere, rhonchi all over back of chest. There is some laryngeal stridor. Expectoration considerable, mucopurulent, aërated. Heart's apex beat not seen or felt, and cardiac dulness obscured by emphysema. Heart sounds apparently normal, but much obscured by the numerous rhonchi in the chest.

There are a few herpetic vesicles on the hard palate; the hepatic dulness extends two fingers' breadth below costal margin. Bowels regular. Urine 1023, acid, trace of albumen, no sugar. Patient improved for a time, the temperature falling slightly, till on May 7th it only reached to 100° F.; the respirations diminished to 24 and the pulse to 116; the patient had less distress and expectoration diminished. On May 9th the temperature rose to 103·4°, dropping in evening to normal. Respirations 40; pulse 132. There was dulness at the extreme right base, with feeble breath-sounds and diminished vocal fremitus. On May 11th, 12th, and 13th, he had a rigor each day, the temperature going up from normal to 104° on each occasion, and the patient got very apathetic and livid, and the breathing irregular and of the Cheyne-Stokes rhythm. He grew much weaker and refused food. The chest signs remained the same. The patient died on May 14th, at 5 a.m., the temperature at the time being 103°.

For autopsy, see P. M. report, 1896, No. 112.

Glioma of the Cerebellum.

Maud D—, æt. 3 years, had been a healthy child till June, 1894, when she began to complain of headache. A year later the child became ill with severe headache, vomiting, and finally unconsciousness; this illness lasted a month. August, 1895, she had hooping cough, and then weakness and tremor of the left arm and leg was seen, and the face was drawn to the left and the left eyelid drooped. There was also occasional vomiting. On November 29th, 1895, the child was admitted under Dr. Allchin. Then the child had no special weakness of arms or legs. The left eyeball was sunken and left eyelid drooped slightly; slight inequality of pupils, which varied considerably on exposure to light. No difference in aspect or movements of the face, except that the left side of the mouth was drawn slightly outwards and the angle a little sharper. Some tremor at rest and movement of left arm and leg, and their reflexes were exaggerated. The child was intelligent. There was occasional effortless vomiting without much relation to food, and occasional spasmodic cough. The chest was normal. Pulse 144, regular. Temperature normal as a rule. Urine

normal. The child got quieter and more wasted, the vomiting occurring about twice a day, and died on March 25th, 1896, from stoppage of respiration, which for a day or two before had been of the Cheyne-Stokes character. At no time were there any convulsions.

For autopsy, see P. M. report, 1896, No. 226.

A Case of External Hydrocephalus.

Lorraine W—, æt. 19 months, was admitted under Dr. Allchin, April 17th, 1896. She was the only child, born of healthy parents. She had never been suckled, but fed chiefly on milk and not on any proprietary foods; there has been no previous illness. At the beginning of March, 1896, the child lost its appetite and vomited occasionally, lost flesh, and had occasional convulsions. On admission it was semi-conscious, and took its food badly. It had a large square head, with an open anterior fontanelle; slight ptosis of left upper eyelid, pupils equal and dilated, but contracted, sluggishly, to light. Some rigidity of legs, but no paralysis of arms or legs, which were very wasted. There was no appreciable beading of the ribs, but some enlargement of lower ends of radii and ulnæ; 10 teeth. The heart appeared normal. Abdomen distended with wind; no enlargement of liver and spleen. Bowels constipated, motions dark; urine normal. The veins of the fundi of the eyes were enlarged and tortuous, but no other abnormal sign. There was slight dulness and bronchial breathing at the apex of the right lung. Temperature was normal. The child remained in a state of semi-stupor, vomited occasionally, the rigidity of the legs increased, and the left forearm was in constant movement, chiefly of flexion and extension. The child screamed on being approached, and wasted more and more. It finally died.

For P. M. appearances, see Pathological Report, 1896, No. 305.

Paralysis of Third Cranial Nerve.

John S—, æt. 25, carman, was admitted under Dr. Allchin, May 2nd, 1896. The family history was markedly rheumatic, but patient has never had rheumatism. No evidence of syphilis, but 4 years ago he was in hospital for an ulcer on the back of

the tongue. On April 21st patient was taken giddy in the street and fell, but did not lose consciousness; pains all over the head began then and lasted an hour. He then felt well for a week, when sharp pains returned all over the head. These lasted 5 days, and on May 30th he found the left eyelid closed and he could not open it, and the headache became limited to the left eyebrow and eye. On admission he appeared healthy except for complete ptosis of left eyelid, and the eye looked to the left, while the pupil was dilated and did not react to light or accommodation. There were no fundus changes. There were no other abnormal signs in any system. The patient was given a mixture containing iodide of potassium, 10 grains, 3 times a day, and in a fortnight the pains and paralysis had greatly improved, and he left the Hospital.

Acute Myelitis.

George T—, æt. 52, a sanitary labourer, was admitted on October 1st, under Dr. Hall. He had a healthy history and no definite history of syphilis, though 30 years ago he had a sore on the penis with buboes, which burst and discharged. He was quite well on September 25th, 1896, when he had a rather severe fall, and a week after he felt numbness in both feet; this increased, and 3 days later his legs gave way under him and felt stiff and cold, and he was unable to pass his water, which was drawn off by a catheter; the next day he was sent to Hospital. On admission his legs were completely paralysed, and the sensation was lost to touch and temperature in both legs and the lower abdomen as far as a line from the 10th dorsal spine to the umbilicus, above which was a hyperæsthetic band about 2 inches wide; a prick could be felt dully below umbilicus, but power of localisation was lost. There was no knowledge of the position of the legs. The patellar reflexes were absent, as were the cremasteric, abdominal, and right plantar, but the epigastric and the left plantar could be obtained. There was incontinence of urine and fæces; urine normal. There were a few bronchitic sounds in the chest, but no other abnormal sign. On October 11th both plantar reflexes could be obtained, and patient said he felt his toes, and occasionally felt a touch on those parts. At this date the hyperæsthetic

zone had changed; it was bounded above by a line from the 4th dorsal spine to a point midway just below the ensiform cartilage, and below by a similar line from the 10th dorsal spine to the umbilicus, and in the area thus marked out the hyperæsthesia was much greater at its upper and lower borders. The patient remained in much the same condition, except that there appeared some evidence of cystitis, and he got much thinner. He was removed to an infirmary on December 8th. While in Hospital the temperature varied between 98·4° and 100° F. On recent enquiry it was found that the patient's condition was unchanged.

Acute Ascending Myelitis.

Chas. K—, æt. 39, carman, was admitted under Dr. Donkin, March 27th, 1896. He had gonorrhœa 12 years ago, no syphilis or other illnesses, except an occasional lumbar pain, for 10 years. He was well till March 15th, when he noticed he had no sensation in the left foot. By the next day this anæsthesia had extended to the buttock, and there was tingling down the leg. On March 17th the numbness and tingling extended down the right leg, and on the evening of March 19th he got an aching pain over the lower part of the spine and left off work, remaining in bed. On March 22nd the numbness and tingling began to ascend the trunk, and incontinence of urine and fæces came on. By March 27th the arms began to be affected; there was no girdle pain at any time. On admission the patient, a well-nourished man, complained of pain down the lower dorsal and lumbar spine, and some tenderness in the left axilla; there was no girdle pain. Over arms, legs, and trunk a touch is not felt, and a pin prick is felt as a touch, but could not be localised. Over the same area a cold test tube is often not felt, but when noticed is called warm; a hot tube is more frequently felt and always recognised as warm. Superficial and deep reflexes lost. The reaction of degeneration was present, and muscular power all but lost over the arms, legs, and trunk; the motion and sensation of head and neck down to the clavicles was normal. Breathing entirely diaphragmatic. Pulse 130, low tension, slightly irregular. Urine normal, but total paralysis of bladder and rectum. He lingered till April 5th, getting worse, suffering much the last 3 days from hiccough and vomiting. The

temperature, normal on admission, rose gradually in an irregular manner, till on the day of death it reached 103°.

For P. M., refer to the Pathologist's report, 1896, No. 236.

Right Hemiplegia, Hemianæsthesia and Hemianopia.

Edward Mason, æt. 76, chemist, was admitted under Dr. Hall on May 7th, 1896. He came of a long-lived family, and his only illnesses had been a previous history of gout, and an attack similar to the present one 5 years ago. No history of syphilis. On the day of admission he was walking, when he fell down and lost consciousness immediately; he was brought to the Hospital. On admission he was conscious, but intelligence was dulled; he had complete loss of motion of right arm, leg, and lower part of face, and the right thorax moved less than the left. Over the whole of the right side, limited precisely by the middle line of the body, there was complete loss of sensation to touch, prick, and heat and cold. The tongue was protruded to the right, and there was right hemianopia. No ocular paralysis. Articulation defective, no aphasia. The pulse was 58, regular, slow, and sustained; much arterial degeneration. The heart's apex beat was in the 5th space nipple line, impulse heaving. No abnormal sounds to be heard. Lungs nil. Urine 1010, acid, no albumen, no sugar. He improved somewhat the next few days, and speech became much more distinct, but the paralyses of motion and sensation remained complete, and there came on rigidity in extension of the right leg, and also of the arm, which was adducted, flexed at the elbow and wrist, the thumb strongly flexed and adducted, the fingers rigid and slightly bent at all joints; with this there was no rise of temperature, and no headache. By May 18th the rigidity got less, and there was slight return of sensation in forehead and face, but not elsewhere; the paralysis remained complete till the patient discharged himself on May 22nd. The sight defect remained till the last.

Tabes Dorsalis.

Annie P—, æt. 28, married, was admitted under Dr. Allchin, April 25th, 1896. Her family and personal history were good, except that when 19 years old she had acute rheumatism. She

has no children, and no miscarriages. Two years ago she began to be weak on the legs, and in October, 1895, she suddenly fell, and her power in the legs got much less, so that she could only walk with assistance. She had also lumbar pain at intervals, and for the last 6 months darting pains in the legs, and troubles in passing her water. Of late the ground has felt abnormally soft, and she has had difficulty in washing her face, as she staggers when the eyes were shut. On admission there was extreme ataxic gait, and inability to stand with eyes shut. Slight tactile loss in legs, especially outer side of right foot; but prick and temperature sense was normal. Muscular power unimpaired. She was unable to tell position of legs in bed. Knee-jerks absent. There was slight inco-ordination of movement in right arm, but no other abnormality. No facial or eye paralysis; pupils normal size, react to accommodation, but not to light. Fundus. The patient was put on liq. hydrarg. perchlor. ♏xxx., and rapidly improved, the pains lessening, and at last ceasing, and finally being able to walk by herself with very little inco-ordination. The pupils also began to react to light, and all the morbid signs improved, but the reflexes did not return. This patient had no signs or history of syphilis, but the effect of rest and mercury was very marked, and she was discharged on June 21st, much improved.

Disseminated Sclerosis.

H. Phillips, æt. 45, confectioner, with no history of syphilis, was walking in the street 6 years ago when his legs suddenly became weak; he was taken home, and remained in bed 4 months with great weakness of legs. This partially passed off, but the legs remained weak. Two years ago pain began in the upper part of the spine, shooting down the legs and up to the head, with feeling of a band round the umbilical region. His legs frequently crossed on walking and he fell; sometimes they could not be abducted. These symptoms continued. On admission under Dr. Donkin, January 20th, 1896, he had vertical headaches, occasional vertigo, faulty memory, and hesitating speech. There was slight nystagmus of right eye on looking to the right; sight good, no fundus changes. There was slight weakness of the right side of face. Arms quite normal. Legs, nutrition

good; knee-jerks very exaggerated; marked ankle clonus persisting of itself for several minutes; sensation normal except to prick, which is impaired from the knee downward. No trophic change. Gait markedly spastic; legs cross each other, and ankle clonus occurs on placing feet down on the toes. No paralysis of bladder or rectum; girdle pain round umbilical region. He was in the Hospital for 3 months, and improved much under rest and 15 grains of iodide a day, though gait was very stiff and weak when he went out of Hospital.

Tonic Contracture of the Interossei of the Hand.

A. P—, æt. 13, a neurotic, intelligent schoolgirl, was admitted under Dr. Donkin, December 30th, 1895. Four months before she had sudden pain in the back of the right hand while cracking walnuts; this got worse, and a splint was applied for 5 weeks, soon after this was removed the contracture came on. The right arm was thinner and weaker than the left, and the right hand tender over the back, the palm being red, shiny, and perspiring; the nails showed no striation, and no other atrophic sign was present. The little finger was strongly adducted and flexed, and the other three fingers flexed; they could be extended, but this caused much pain. The muscles of the thenar and hypothenar eminences were wasted, but no muscle showed any degenerative reaction. Sensation of all kinds was normal. The contracture disappeared entirely under anæsthesia, and was supposed to be of functional origin.

Exophthalmic Goître.—Jaundice.—Relief.

Annie S—, æt. 19, a nursemaid, was admitted under Dr. Allchin on April 18th, 1896. Her father suffered from heart disease, but rest of family healthy. She had measles 11 years ago, and slight rheumatism in 1889. Catamenia only began a few months ago. She has always been very excitable. About Christmas, 1895, she fainted, and since that time has suffered from headache, but for the past 3 years she has noticed her throat was large and her eyes prominent. Palpitation of the heart appeared about Christmas last, and since then she has been languid and sleepy and short of breath. On admission

she was not anæmic, but the eyes were very prominent and Von Gräfe's sign was present. No diplopia. The thyroid was generally enlarged, especially the lateral lobes, and there was a distinct thrill over them with a systolic murmur. Internal jugular veins much enlarged and pulsating. The heart's apex beat was in the 5th space internal to the nipple, but was diffused and forcible; the heart appeared enlarged slightly upwards and to the right, and epigastric pulsation was present.* Pulse 120, small, quick, soft, and regular. There was nothing abnormal in the lungs or abdomen. Temperature varied from 98° to 99·5° F. Urine normal. Patient remained in the same condition, and was given thyroid tabloids, till on May 30th she had urticaria, and the following day jaundice appeared, this deepened considerably in a few days. Now there was much tenderness in the right hypochondrium, but the liver could not be made out to be enlarged. Diarrhœa came on, and the temperature now mounted each day to 100·5°, intermittently. The patient wasted much, and gradually the jaundice lessened till it disappeared about July 16th; she gradually improved in weight, though the pulse rate remained about 120, and the eyes remained prominent. The thyroid appeared rather smaller, and undoubtedly was much harder to touch. She left the Hospital on August 13th, 1896.

Exophthalmic Goître, with Choreiform movements.

I. T. G—, æt. 17, was admitted under Dr. De Havilland Hall on May 21st, 1896, complaining of swelling of the neck and shaking of the extremities. Her family history was good, except that one sister suffered from epilepsy. She had measles followed by hooping cough when 4 years old, but no other illnesses. On April 22nd she first noticed swelling in the neck, the day after she was frightened by seeing her sister in a fit; on May 1st she was unable to hold anything in the left hand, and simultaneously there came on jerking movements of the left arm and leg; a week later the right arm began to jerk. On admission she was an anæmic, emotional girl, with prominent eyeballs and constant movements in both arms and the left leg,

* A systolic murmur was heard at the apex conducted to the axilla and an occasional systolic thrill.

resembling those of chorea; there was considerable muscular weakness. The thyroid body was found to be regularly enlarged and pulsating. The jugulars were also enlarged and pulsated, but did not fill from below. Pulse 132, regular, quick, rather low tension. Heart's apex beat in the 6th space, ½ inch outside nipple, heaving and diffused, pulsations in epigastrium and 3rd intercostal space. Cardiac dulness increased in all directions. A systolic bruit heard at apex and round the left side to the angle of the scapula. The usual hæmic bruits were present. There was occasional palpitation and nausea in the morning; no vomiting. Bowels regular. All other systems were normal. Catamenia regular. The pulse diminished in frequency by rest in bed to 120, but on June 3rd she noticed that she saw double. The patient was treated with iron and digitalis, and left the hospital slightly improved on June 24th, though the movements and the enlarged thyroid still persisted. The temperature varied from 98·4° to 99·6° throughout.

II. R. C—, æt. 18, a general servant, was admitted February 26th, 1895, under Dr. Donkin, complaining of weakness. Her mother died of heart disease and her father has "heart trouble"; one sister died of phthisis and her other relations are not strong. She says she has always had a weak heart, and been feeling ill for a year, but lately got more breathless on exertion, and had occasional severe palpitation. On admission she was anæmic, but well nourished, marked tremors of both hands. Thyroid gland enlarged and soft. Eyes slightly prominent, some oscillation of eyeballs; pulse 112, soft, regular. Heart apparently normal, except for the usual hæmic murmurs. Catamenia irregular and scanty. Otherwise there was nothing abnormal. The patient improved while taking iron and arsenic, and got much less anæmic, but the fulness of throat and eye prominence did not disappear. She left the Hospital March 20th. During her stay the temperature varied from 98° to 99·2° each day.

Exophthalmic Goître.

Emma O—, æt. 60, laundress, was admitted March 12th, 1896, under Dr. Donkin. Family history good, and she has been very healthy except for an attack of pleurisy 26 years ago.

Twelve months ago she noticed a swelling in the neck, which gradually increased; 4 months later she began to suffer from palpitation and dropsy of feet and ankles; the eyes enlarged, and she had a feeling as if they were filled with grit; 4 months ago she was treated and improved, but again relapsed, and 3 weeks ago she took to her bed on account of dropsy of legs. On admission she had a terrified expression, owing to the sclerotic being visible above the cornea of her very prominent eyes; she was rather thin. The thyroid body is much enlarged uniformly, it pulsates, and a systolic bruit can be heard over it. There was much œdema of loins, buttocks, and legs; she perspired very freely. Von Gräfe's symptom was present. Pulse 108, irregular, collapsing; arteries very tortuous and rather thick. There was much venous and arterial pulsation in the neck. The heart appeared enlarged to the right, and there was much epigastric pulsation; the apex beat was in the 5th intercostal space, rather outside the nipple line; a systolic murmur was heard at the apex. There was a trace of albumen in the urine; the other systems appeared normal. The patient in spite of rest in bed did not improve, and on April 15th the pulse was 160, but more regular than before. She then was ordered digitalis tinct. ♏viii. and ext. ergot. liq. ♏xx., under which she rapidly improved, and on April 29th pulse rate was only 92, and was regular; there was less palpitation. The apex systolic murmur was still present. On May 17th she was discharged, much improved, though the proptosis and the thyroid enlargement were unchanged, but she was quite free from palpitation, and the pulse was regular and only 86 to the minute.

Ruth P—, æt. 31, was admitted under Dr. Hall, April 21st, 1896. She had pleurisy 5 years ago, and influenza 4 years ago. There was no history of nervous disease in the family. Since Christmas, 1895, she has been weak and languid, and previously to this she had palpitation, and noticed her eyes were becoming prominent. Three weeks ago she noticed her neck was swollen. On admission she was thin and anæmic with marked proptosis, but Von Gräfe's symptom was not present, and there was no double vision. The thyroid was enlarged, especially in the right lobe; it pulsated, and a systolic murmur

was heard over it. Pulse 116, small and compressible. Heart's apex beat 5th space, nipple line, rather heaving. Some increase of heart's dulness to the left. There was a systolic murmur over the precordium, best heard in the 3rd left interspace. She had a clean tongue but suffered from constipation, and now and then had a choking sensation in the throat; no dysphagia. The other systems were normal. Menstruation regular. She was ordered rest in bed, with ♏x. tinct. digitalis and ♏x. tinct. nux. vom., and slowly improved, though the heart's action remained as rapid as before. She was discharged on May 20th somewhat better.

4.—DISEASES OF THE LUNGS.

(?) Tuberculosis (Meningitis).

Beatrice S—, æt. 22, a married woman with one child, was admitted under Dr. Allchin, May 1st, 1896. Her father and mother were alive and well, but 7 out of a family of 10 had died in childhood. Patient was a healthy woman till the birth of the child, July, 1895, after which she was in bed a month with "puerperal fever" and inflammation of the breasts; she has never been strong since. In March, 1896, she had a series of shivering fits, followed by sweating, and a severe cough came on; she lost her appetite; the catamenia were then regular, but she had not menstruated since March, 1896. On admission she was thin, not markedly anæmic. Pulse 100, regular, small, slightly dicrotic; heart apparently normal. The temperature was 104° on admission, and remained high, with daily fluctuations of about 2°. There were a few sibilant rhonchi and râles over the whole chest, but no other abnormal signs. The abdomen was tender, but not distended. The spleen was felt to be large and was tender; no other abdominal organ was enlarged. Tongue dry and furred. Great anorexia. Bowels constipated. Urine acid 1020, contains nothing abnormal. The patient remained in a sleepy state, vomiting occasionally after food, and frequently lying on the side with knees drawn up. The temperature continued high, and the pulse became more rapid and dicrotic.

On May 30th some small râles were heard at the left apex, back and front, but nothing else abnormal in the chest. She got much weaker, with great tremulousness of the hands, and more frequent vomiting. The eyes showed double optic neuritis, but there was no marked headache or other cerebral symptom. She died June 15th, the temperature mounting to 106·8° before death. Autopsy refused.

Acute Pneumonia (Long-continued Pyrexia).

George H—, æt. 19, a packer, was admitted under Dr. Donkin, May 1st, 1896. He had had no serious previous illnesses, and the family history was exceptionally good. The illness began suddenly on April 27th with shivering and prostration and pain in the right axilla. He began to cough and expectorated small quantities of blood. On admission he was thin, and suffering much dyspnœa. The temperature ranged from 102° to 103° F. There were signs of consolidation down to the 3rd rib on the right side in front and behind to the angle of the scapula. The urine was scanty, acid, deposited urates; no albumen, chlorides much diminished. Heart normal. Pulse 120, full, regular. The patient continued to expectorate about ℥i. of blood in 24 hours. The temperature descended imperceptibly, till on May 13th the highest reading was 102° F., and then the consolidation was limited below by the 2nd rib in front and by the spine of the scapula behind. There were numerous inspiratory crepitations, marked dulness, and tubular breathing and whispering pectoriloquy. Expectoration still streaked with bright blood. The dyspnœa still continued, and by May 20th some retraction at the right apex was apparent; the physical signs were as before, but the blood had disappeared from the sputum. The patient had been losing flesh, but felt better in himself. On May 28th the breathing at the right apex had an amphoric character, and there was marked whispering pectoriloquy and a few small mucous râles. The moist sounds gradually cleared up and the patient began to gain weight, and finally the patient went out of the Hospital, still having retraction, dulness, and bronchial breathing at the right apex. From time to time the sputum was tested for tubercle bacilli, which were never found.

5.—DISEASES OF THE HEART.

Mitral Stenosis.—Hæmoptysis.—Death.

Blanche G—, æt. 25, a gilder, had acute rheumatism 15 years ago, and for the last year had suffered from dyspnœa, and a bad cough for 10 months. On December 19th the cough was followed by hæmoptysis, and the patient was admitted under Dr. Allchin. On admission there was much dyspnœa and orthopnœa; she was rather cyanotic, with irregular feeble pulse of 112 a minute; dilatation and pulsation of jugulars. Heart's apex 5th space just outside nipple, dulness up to 3rd rib and to the right sternal edge to the left beyond the nipple. The heart sounds were very irregular, no murmur to be distinguished. There was much hæmoptysis, and 7½ ozs. blood were taken from the arm, but the hæmoptysis continued. The breathing became intermittent, and the patient sinking gradually, died on January 4th, 1896. There was much anasarca, and some ascites. The urine contained a trace of albumen.

Mitral Stenosis and Regurgitation.—Cerebral Embolism.—Aphasia.—Relief.

Harry H—, æt. 23, a labourer, had acute rheumatism 2 years ago, and 2 months ago caught a chill, leaving him with a cough. He was admitted under Dr. Hall, February 20th, 1896, suffering from dyspnœa and palpitation. The pulse was 94, irregular, and small. Heart's apex beat 5th space, nipple line, diffused. Evidence of cardiac dilatation. There was a presystolic thrill and a systolic murmur at the apex. The urine contained no albumen. On February 26th he suddenly, about midnight, developed motor aphasia, with palsy of the right side of the face and tongue, and slightly of the right arm. He could understand speech and writing, but could not speak anything but "No, Sir," and "I can't." All this palsy improved after a day or two, and in a fortnight he could speak as before. He was discharged March 22nd much relieved. There was never any dropsy, nor albumen in the urine. There was no rise of temperature at any period.

6.—DISEASES OF THE ABDOMINAL VISCERA.

A Case of Melæna in Bright's Disease.

Mary A. B—, æt. 55, a nurse, was admitted May 6th, 1896, under Dr. Donkin. She said she had always had good health till May 3rd, when she felt weak and languid, and three days later she vomited up a breakfast-cupful of blood. On admission she wast hin and anæmic, with a small, feeble, compressible pulse of 108. Heart and lungs normal. Tongue not furred but dry; appetite good, but meals are followed by pain coming on in a quarter of an hour, with waterbrash and nausea, but no vomiting. Bowels constipated. There was some epigastric tenderness. Catamenia ceased. Urine 1020, about normal in quantity, acid, containing ¼ albumen. On May 10th and 11th she had two tarry motions containing blood, which were followed by others in increasing frequency. She became very anæmic and finally died. The temperature ranged from 98·4° to 99°.

This case naturally was taken for a duodenal ulcer, and treated as such. There was no headache, no œdema or other symptom of kidney disease except the albuminuria.

Post-mortem, there was found cirrhosis of the kidneys, and numerous ulcers in the small and large intestines.

A Case of Splenic Leukhæmia.

E. D—, æt. 27, a bootmaker, was admitted under Dr. Allchin, May 1st, 1896. He had a healthy family history, and had been fairly healthy till Easter, 1896, when he fell ill and was found to have a temperature of 102°; he was ill for a fortnight with headache, occasional epistaxis, and some deafness. Since then he has been getting weaker. On admission he was thin and anæmic; pulse 120, regular and soft; cardiac sounds normal. The temperature ranged from 98·4° to 100°. The abdomen was full and tense, and the spleen much enlarged and hard; it extended down to the iliac crest and forwards nearly to the middle line, and its dulness was marked in the chest up to the 7th rib in the mid axilla. The liver was slightly enlarged. There was no enlargement of lymphatic glands. In the fundi of the eyes the disks were ill defined, the veins enormously

enlarged and tortuous, and numerous flame-shaped retinal hæmorrhages present. The blood showed 50 per cent. of hæmoglobin; the red corpuscles diminished to about ½, and the white corpuscles increased 50 times. The white corpuscles were of two kinds, (*a*) large mononuclear, (*b*) ordinary polynuclear leucocytes; there were a few lymphocytes, smaller than the leucocytes, with a single deeply staining nucleus. Many of the white corpuscles showed large bright spherules, the so-called eosinophilous granules. The patient complained of deafness and noises in the ears, and occasionally vomited; but on May 29th his temperature mounted to 102°, and he had pain in the left axilla, where was to be heard well-marked friction. Later on dulness appeared here with other signs of fluid, which extended to above the angle of the left scapula; this remained for some weeks, and then subsided. He appeared to improve in general health, and on July 3rd the white corpuscles were found to have diminished slightly in number, and the red cells to have increased, while the spleen appeared to have diminished in size. He went out the next day. During his stay he was given 3 to 6 drops of liquor arsenicalis three times a day.

Chronic Ulcerative Colitis.—Death.

James B—, æt. 26, a policeman, was admitted under Dr. Allchin, July 19th, 1896. His family and personal history were good. A week before admission he vomited once or twice and had a headache, malaise and diarrhœa, with some abdominal pain. The only cause he could suggest was eating a quantity of cherries and black currants. On admission he was well-nourished. Cheeks flushed. Tongue dry and thickly coated. Temperature ranged between 98° and 100°. Pulse 90, small, quick, soft, dicrotic. The abdomen was retracted, but not tender. Some pain in both iliac fossæ. There were no spots, and nothing else abnormal. There was profuse watery diarrhœa. Urine normal. Lungs and heart normal. There were about 16 motions a day, sometimes green, sometimes peasoupy, and sometimes containing a little blood. They contained no mucus, but occasional threads of epithelium. The diarrhœa continued, unchecked by opium enemata and bismuth mixture. The patient wasted, and the abdomen became more and more

retracted. The pulse got more rapid till it reached 150, and became very small and irregular, and finally the patient died. The temperature was raised to 100° the first 3 days after admission, but then descended to normal, very occasionally rising in an irregular way up to 100° F.

For autopsy, see P. M. report, 1896, No. 323.

Acute Ulcerative Colitis.—Death.

Caroline W—, æt. 36, a bookbinder, was admitted into the Hospital, September 1st, 1896. Her family history was good. She had been subject to "bilious attacks," and had been a vegetarian for 2 years. The last year she has not been feeling well, and last summer was liable to slight diarrhœa. This came on again on August 12th, and the next day she took to bed, but the diarrhœa continued. Before this attack came on she had eaten a quantity of fruit. On admission she was rather thin, tongue red, dry, and raw looking. Abdomen slightly distended, especially in the umbilical region, resonant all over, slight general tenderness; no spots. Spleen cannot be felt. There were 8 to 10 motions a day, green, slimy, and very offensive. The other organs appeared normal. Urine normal. The diarrhœa continued in spite of opium per rectum and bismuth internally, and the temperature varied between 99° and 102° F. There was occasional vomiting. The patient got weaker, and the pulse rapid and feeble, and she died on September 13th.

For autopsy, see P. M. report, 1896, No. 344.

Colitis.—Relief.

John M—, æt. 22, a caretaker, was admitted under Dr. Hall, June 29th, 1896, complaining of vomiting and pain in the left iliac region. There was a family history of phthisis, but patient had had no previous illness except scarlet fever in childhood. On June 25th he had pain in the left iliac region with some tenderness, and the next and following days he vomited after any food. On admission he looked strong. Tongue was slightly furred. Abdomen slightly distended all over, and some tenderness in the left iliac region. Bowels were open twice a day, motions loose and offensive. Urine normal, except a slight

deposit of urates. Other organs normal. Temperature ranged for the first 3 days between 99·8° and 101°, then descended slowly to normal. On July 10th a small quantity of darkish blood was passed with a motion. The vomiting and diarrhœa gradually lessened, and the patient was discharged on July 18th in good health.

Tubercular Peritonitis.

I. Rose A. May, æt. 35, a married woman, was admitted December 13th, 1896, under Dr. Allchin. No history was obtained; she was anæmic and wasted, with slight cough; no expectoration. There was dulness and bronchial breathing at the apices of both lungs as far as the spines of the scapulæ behind and the 2nd rib in front; but no moist sounds were heard. The abdomen was distended, and there was bulging in the flanks; umbilicus protruded and tender; whole abdomen tender and doughy to feel. There were signs of fluid in the flanks. Liver and spleen were not enlarged. The urine was normal. Catamenia very scanty and irregular. The temperature went up to 100°, occasionally to 101°. There was some diarrhœa, the motions being rather offensive. The patient improved somewhat, and gained weight during her 2 months' stay in the Hospital.

II. Constance J—, æt. 7 years, admitted under Dr. Allchin, February 3rd, 1896. There was a strong family history of phthisis. This child had measles and chicken-pox 2 years ago, from which she appeared to recover. This illness began 3 weeks ago with pain about the umbilicus and a furred tongue, but no sickness nor diarrhœa. The child on admission had a temperature of 101° F., was very drowsy, with flushed cheeks and furred tongue. The abdomen was distended and resonant, spleen and liver not enlarged. Bowels constipated. Chest nil. The child got evidently worse, being more drowsy, almost unconscious, and having to be roused for food, which, however, she takes well; she remained in this condition for a fortnight, with a temperature ranging from 98° to 104° each day, when she improved, and though her weight still diminished she generally appeared better and quite bright, and was sent to a convalescent home on March 27th.

Volvulus of Small Intestine.—Peritonitis.—Death.

W. McKenna, æt. 18, a clerk, had always suffered from constipation, and always had a large abdomen; a year ago had an attack of abdominal pain with vomiting, lasting a few days. He was admitted under Dr. Allchin, January 14th, for constipation and pain in the abdomen, which had lasted a week. On admission he was a thin undersized boy, complaining of constant pain over the lower part of the abdomen on both sides; this is made worse by pressure, and at intervals increases much, causing him to draw up the legs in bed. The tongue was coated. There was irregular vomiting of food and greenish matter. The abdomen was distended below the umbilicus, did not move with respiration, it was very tense and resistant, and gurgling was felt all over. It was tympanitic except in left iliac region. Liver and spleen were normal. Urine contained no albumen. He was given an enema, which acted very slightly, but much wind escaped from mouth and rectum. On January 16th two enemata were given, which had no action, and the abdominal pain increased and got more paroxysmal, while the boy got more collapsed, with sunken and drawn face and a rapid, small, and irregular pulse. The abdomen got much more distended before death and more acutely tender. He died the evening of January 16th. The temperature throughout was normal.

For autopsy, see P. M. report, 1896, No. 182.

Appendicitis.

G. W—, æt. 36, a gas engineer, was admitted March 18th, under Dr. Allchin. He had been very healthy, but subject to constipation. On March 14th he was seized suddenly with pain in the right iliac region, which, however, did not prevent his working for two days, when his bowels having been confined for 4 days he took liquorice powder, which he immediately vomited. He went to bed. During the next two days he had two motions, constipated, but otherwise normal. On admission he had dry lips and a pale, flabby tongue, furred in the centre. Temperature varied from 98·4° to 100°. The abdomen was generally distended, but most so in the right iliac fossa, which

is very tender, and a sense of resistance is felt reaching as high as the umbilicus; it was too tender to percuss. He passed a dark brown fluid motion with a few scybalæ. He appeared to improve and the pain lessened, till suddenly, about midday on March 21st, fairly suddenly, severe pain came on all over the abdomen, which became more distended and did not move with respiration. He seemed very collapsed. Pulse 114, irregular, quick, and soft. He vomited greenish fluid at intervals. He was given morphia hypodermically to relieve pain, but never rallied, and died on the early morning of March 23rd.

For autopsy, see P. M. report, 1896, No. 223.

Hydatid of Liver.

A. J—, æt. 26, a 'bus conductor, had pneumonia in 1890, and in 1894 was treated for gastric ulcer, having one attack of hæmatemesis; again ill in June, 1895, with hæmatemesis, he improved and remained well. About a week ago he noticed an abdominal lump accidentally, and came to the Hospital, where he was admitted under Dr. Allchin, January 17th, 1896. He was rather anæmic, with good appetite, and no pain after food, but occasional colicky pains in lower part of abdomen. There was local epigastric bulging, the lower limit descending on inspiration, slightly tender; it measured 3 inches transversely, and on expiration extended midway between ensiform cartilage and umbilicus; it was dull on percussion. Liver and spleen apparently not enlarged. The heart's apex beat was in the 4th space, ¾ inch outside nipple, and the heart dulness extended upwards to the 3rd rib cartilage. No murmurs. The tumour was aspirated January 31st, and a clear fluid containing chlorides but no albumen was withdrawn. The previously normal temperature rose for two days to 102°, and then descended to normal. There was some abdominal pain and tenderness for the same period, but no other symptoms, and the tumour diminished in size.

A Case of Adhesion of the Stomach to Surrounding Parts.

Eliza B—, æt. 64, was admitted under Dr. Allchin, November 28th, 1895. She had had "typhus fever" 50 years ago, and

"gastric fever" 40 years ago, and for many years suffered from indigestion, which has been worse lately. She has a continuous burning or gnawing pain in the epigastric and left hypochondriac regions, increased after food, but always present; frequent vomiting after food, and much wind and palpitation. She had never passed any blood by mouth or rectum since the age of 17 years, when she had "coffee ground vomiting." Lately she has lost a great deal of flesh. On admission she was very emaciated, and suffering from the symptoms described above. Teeth absent. Tongue flabby and furred. The abdomen was not distended, and could not be examined on account of the great tenderness and contraction of the muscles. The bowels were constipated. There was no obvious affection of any other system. During the first 6 weeks after admission her weight declined from 6 st. 5 lbs., to 5 st. 10 lbs., the pain and other symptoms not changing. January 10th, 1896, it was noted there was no stomach resonance above the costal margin, nor was this resonance increased downwards. On lying on the right side there was a feeling as if of something in the left hypochondrium falling forwards, and of a dragging sensation. The abdominal pain had become so severe that morphia had to be frequently injected. On February 17th an abdominal section was made, and the stomach was found to be fixed to the abdominal wall by very numerous adhesions of fibrous tissue in bands about ¼ inch long, some of which were broken through, but it was found impossible to clear all away, and the wound was closed. No ill effect followed the operation, and for a time the pain was lessened, but on her discharge on April 28th there was little if any improvement.

A Case of Enlarged Liver with Paroxysmal Attacks of Salivation.

Martha H—, æt. 45, a married woman with 12 children, was admitted under Dr. Allchin, March 3rd, 1896. She had a rheumatic history, and has had three attacks of rheumatic fever, the first one at 11 years of age, since when she has suffered from dyspnœa. She had a painless attack of jaundice 10 years ago. She is strictly temperate in food and drink. Her illness began in January, 1896, when she vomited and lost consciousness for 2 hours, but had no convulsion. On recovering con-

sciousness she had several severe rigors, which left her weak, and with a slight epigastric pain and a feeling of a lump in the epigastrium, which disappeared, and she began to bring up a clear fluid. On admission she looked weak but not wasted. Every few days she brought up an aërated thin fluid, glairy looking, it was alkaline and digested starch, but not proteid, and hence appeared to be saliva. Tongue large and flabby. Appetite bad. The abdomen was slightly distended, and was tender in the epigastrium. The liver edge was three fingers' breadth below costal margin, and below it an indistinct sense of resistance was felt. Spleen could just be felt. There was no jaundice. The heart appeared slightly enlarged to the right, and a systolic murmur was heard at the apex and the left axilla. It was suggested that the character of the liver surface was harder, more elastic, and tense towards the right, and the possibility of a local cyst in connexion with the pancreas was discussed. The condition of the patient remaining the same, as she continued about once a week to bring up O. ii. of saliva each day for two or three days, and was obviously getting weaker, especially during these attacks, abdominal section was performed by Mr. Stonham. Some fluid escaped from the peritoneum, and the liver was discovered much enlarged, but there was no further light thrown on to the case. She recovered rapidly from the operation, and for a fortnight had no salivation; then this returned coincidently with a swelling which appeared below the right lobe of the liver, and extending to the iliac crest; it was tense, and its lower limit very rounded.

Acute Yellow Atrophy of the Liver.

Jennie B—, æt. 38, housemaid, was admitted under Dr. Hall, April 12th, 1896. Her family and personal health were good. She had had no acute illnesses till a week before admission, when she had pain in the epigastrium after food. The next day she noticed she was jaundiced and her ankles were swollen. The abdomen also increased in size. Two days later she vomited, and this has continued till admission. In Hospital she appeared a strong woman, not emaciated. The ankles were slightly œdematous, and she had much jaundice. The temperature never mounted over 99° F. Pulse 120, regular and compressible.

There was a pulmonary bruit over an otherwise normal heart. Respiratory system nil. Tongue covered with white fur; appetite lost; much thirst. There is epigastric pain and fulness after food, but no vomiting now. Bowels open once or twice a day, motions clayey. Abdomen was slightly distended. The liver dulness upwards extended to the 5th rib in the nipple line, and the lower edge was felt 1 inch below the costal margin. Spleen could not be felt, but its dulness seemed increased. There was epigastric tenderness, and the stomach appeared to be over-distended. Urine was dark from bile pigment, sp. gr. 1030, acid, and contained no albumen. The patient was very sleepless, and lay usually in a dazed condition; the jaundice increased. On April 22nd she began to have diarrhœa, motions being loose, light-coloured, and offensive; this persisted till death. The liver edge descended to 2 inches below the ribs. The abdomen got more distended, and there was free fluid in the peritoneal cavity. The urine was tested for leucine and tyrosin and none found; the percentage of urea was 5 per cent., but the amount of urine was very much diminished. The mental state was worse, the patient becoming drowsy and indifferent, and passing her excretions under her. April 25th the blood tested showed that the red corpuscles were diminished to about half of the normal; very slight increase of white corpuscles, which were of very varied size. The red corpuscles were irregular in size and shape. The liver dulness had been noticed to be diminishing during the last 3 days, and on April 25th it was only 1 inch vertically. The patient got completely unconscious, and the pulse very rapid and feeble. The patient died on April 26th. The liver was found in the condition of yellow atrophy, and phosphorus was tested for in it and the intestinal contents, but found not to be present.

7.—VARIOUS DISEASES.

Septicæmia.—Death.

Dorcas E. D—, æt. 40, a shopkeeper, was admitted under Dr. Allchin, June 6th, 1896. She was a childless widow, with a history of pleurisy and slight attacks of rheumatism. She said she was a moderate but not excessive drinker of beer and spirits,

but had had morning vomiting for years and occasional epistaxis. Her present illness came on June 1st with pain in wrists and knees and ankles; the latter joints swelled, and she took to bed with fever and weakness. On admission she could not move for the pain in ankles. She had a flushed face with many enlarged vesicles. Lips tremulous. Tongue large, flabby, furred and dry in the centre. Temperature 101·4°. Pulse 108, full and strong. Nothing abnormal in heart or lungs. The liver was palpably enlarged. Spleen could not be felt. Urine acid, 1025, contained some mucus and a trace of albumen. There was considerable œdema over the dorsum of both hands and feet, any movement of which caused great pain. The skin was of a dusky red colour, and was slightly desquamating. The pain and swelling remained in the affected parts, and the fever continued, till at 7 a.m. on June 15th it mounted suddenly, till at midday it was 109°. She was placed in a cold bath and the temperature descended, till at 1.15 it was 105°, and she returned to consciousness. She was removed from the bath, and the temperature ½ hour later had fallen to 102°; it rose again slightly, to fall the next day, and from this time it varied from 102° to 104°. On June 19th there were evidences of fluctuation in the left wrist, and an incision was made and about 1 oz. of thin yellowish fluid removed. The patient at this period lay in a semi-stupor, with a weak pulse of 126, and a tremulous dry tongue. The temperature hovered about 103°, as when it rose higher the patient was sponged. She grew weaker and took food badly, and finally died June 26th, the temperature then being 103·6°. There had been no vaginal discharge, and examination per vaginam revealed nothing abnormal.

For autopsy, see P. M. report, 1896, No. 294.

Another case very similar occurred in a woman aged 40, but the details are almost identical with those above.

Hyperpyrexia.

Edith B—, æt. 19, no occupation, was admitted under Dr. Allchin, March, 1896. She had a healthy family history; she had had inflammation of the lungs 4 years ago, and had suffered on and off from amenorrhœa. In 1894 she was in Westminster Hospital suffering from headache and nausea, and she was

found to have optic neuritis and albuminuria, but no retinitis; cerebral tumour was diagnosed; since that time she has suffered from almost continuous headache. On admission she was semi-conscious, with a temperature of 106° F., with headache, but no tenderness; skin hot, dry, and scaly, with a papular eruption on the exterior aspect of the legs and forearms. Pulse 124, soft and small. Heart enlarged transversely, the apex beat being in the 4th space just outside the nipple, there was a systolic murmur at the apex not conducted. Lungs normal. There was no vomiting. Bowels constipated. Urine small in quantity, urates and a good quantity of albumen, but no casts. She remained in much the same condition, the temperature generally remaining high, between 104° and 106°, but with occasional drops to 100° and rising with a rigor. She was sponged, and ice applied to the head. She passed from O. i. to O. ss. of water a day, sometimes containing albumen and sometimes free from it. Finally she died on April 21st, the temperature at death being 110° F.

At the autopsy there was nothing abnormal to be found, except the effects of a continued high temperature.

Pyæmia.—Hyperpyrexia.—Death.

A. S—, æt. 21, was admitted under Dr. Hall, May 31st, 1896. He was an abstemious groom with a healthy family and personal history, had no previous serious illness, and was well a fortnight before admission, when he was seized suddenly with pain in the right shoulder, which spread down the arm; he gave up work a week later feeling weak and feverish, and finally was admitted. He then had a flushed face and hot perspiring skin, and temperature of 103°. There was swelling and much pain in the right shoulder, and to a less extent in the left. Pulse 133, full. Heart and lungs appeared normal. Tongue was coated with a thick yellow fur, abdomen distended with flatus, bowels constipated, and appetite lost. Urine acid, 1030, contained much urates but no albumen nor sugar. He was given sodæ salicylate every 4 hours, but this did not reduce the temperature, which varied daily from 99·5° to 103·5°. Six days later the pains in the above joints had slightly improved, but there was pain on movement in the right knee and ankle, and on June

6th the temperature rose to 105·4°, and he was kept in the wet pack, occasionally iced; the temperature however remained high, never descending below 103°, and the pulse gradually failed and became very rapid, and the patient died, the temperature being at death 105·6°.

ACUTE RHEUMATISM.—PERI- AND ENDOCARDITIS.—RELIEF.

John D—, æt. 20, barman; no previous rheumatism. In October, 1895, joint pains began, and he took to bed a week later. On admission under Dr. Allchin, December 10th, 1895, he was perspiring freely. Temperature 103°. Pulse 88, regular, full, not compressible. Respirations 54. Several joints were swollen and painful. Heart's apex beat 5th space, nipple line, with a diastolic thrill. Heart's dulness up to 3rd rib, and as far as the right sternal edge there was a systolic apex murmur, and a reduplicated and accentuated 2nd sound. The lungs showed signs of bronchitis, and there was much frothy expectoration. The urine was normal. A week later a double aortic murmur was heard, there was much œdema of bases of lungs, the pulse was more frequent and irregular in force and rhythm. December 17th the cough was worse and the sputum streaked with blood; digitalis, which appeared to have no good effect, was discontinued. The temperature was about 101°. Mucous râles were heard all over the chest. After another fortnight the patient improved, the pulse became more regular, and fair volume, 100 a minute. December 31st the left chest moved less than the right, the heart's dulness as before. Soft to-and-fro friction sounds heard at the base; this disappeared 3 days after. Pulse 100, quick, irregular. On January 13th the pericardial dulness extended to the 2nd rib cartilage and to the right sternal edge, the sounds remaining the same, but the temperature lowered to 99°. January 17th he was better; pulse still small and compressible, 120, regular. Pulsation in 2nd and 3rd intercostal spaces. Heart's apex beat not altered, but feeble. No thrill. Murmurs as before, but a presystolic mitral was now heard for the first time. The patient improved, the temperature gradually becoming normal, and the pulsation in the 2nd and 3rd spaces disappearing, otherwise the condition as before. The patient went out, February 27th, 1896, much improved. There was no œdema nor ascites from first to last.

Aortic and Mitral Disease.—Pericarditis and subsequent Adhesion.—Venous Thrombosis.

H. W—, æt. 17, a boy employed at a cardboard factory, was admitted, November 26th, 1895, under Dr. Allchin. His family was long-lived and his personal history good, except for a 3 weeks' attack of acute rheumatism 3 years ago, and some slight rheumatic pains since. Three months before admission he began to have weakness and dyspnœa; left off work a month later, when he had more severe rheumatic pains. He lost much flesh, though his appetite was fairly good. On admission he was weak, anæmic, and emaciated. Respirations 40, shallow and laboured. Pulse 88, quick and small, and not quite regular in rhythm. His heart was enlarged in all directions, and there was a presystolic thrill and double murmur at the apex. There was much venous pulsation in the neck, and also signs of congestion and œdema of the lungs. The temperature at first was below normal. He remained in much the same condition till December 14th, when choreic movements of the left side appeared, and a few days later these appeared also on the right side. December 23rd the superficial veins of the chest were enlarged, and a week later there was evidence of fluid in the pericardium, slight basal friction, and much precordial pain, and the temperature rose to about 101°, its course being irregular. January 13th the face, neck, and chest down to 3rd rib cartilage got cyanosed, swollen, and pitted on pressure, the arms not being affected. The pulse rose to 116, but was regular though compressible. The patient was leeched, and the swelling subsided 5 days later, but at this time he got very apathetic and dull, vomited frequently, and passed the excretions under him. The temperature had again become normal. The vomiting lasted for a week, the patient emaciating rapidly. By February 10th, 1896, the signs of pericardial distension had disappeared, and there was fluttering in the 4th, 5th, and 6th interspaces extending as far as the mid-axillary line. A loud diastolic basal murmur was heard and a systolic at the apex. A pulse-tracing at this time showed a quick percussion wave with a very rounded apex, the dicrotic wave badly marked, the rate was 105, and it felt soft and regular. The patient improved

gradually and gained weight, leaving the Hospital, February 6th, 1896.

Mitral Stenosis.—Tricuspid Regurgitation.—Great Cardiac Dilatation.—Death.

K. B—, æt. 34, married, was admitted under Dr. Allchin, November 22nd, 1895. Her family all were rheumatic; she had acute rheumatism 18 and 8 years ago. Her present illness dates from her last attack, when she was laid up 9 weeks. Since then she has done no work, suffering from pain in the left side and dyspnœa, and palpitation on exertion, also frequent bronchitis. The last 3 months she has been slightly jaundiced, and had anasarca for 2 months, and swelling of abdomen 6 weeks. On admission she was jaundiced, rather anæmic, and slightly cyanotic, propped up in bed, breathing rapidly. Pulse 76, very irregular in force and frequency, soft and quick. Much jugular pulsation, and they fill from below with pulsation. Heart's apex beat in 5th space one inch outside nipple, fairly forcible, with a presystolic thrill. Cardiac dulness as high as 3rd rib, and in a curved line from thence on the left side to the heart's apex beat, and on the right in an exactly similar manner to the 5th interspace; over the whole of this area pulsation could be seen, as also in the epigastrium. There was a loud systolic at the apex conducted out; also another systolic murmur heard best in 4th interspace, 1½ inches to right of sternum, and not well conducted in any direction. No second sound can be heard. There were a few basal moist sounds at the back of the chest, but no dulness. The abdomen was distended with fluid, and the liver enlarged and hard. Spleen not felt. Very little anasarca. Urine 1022, phosphates, a trace of albumen, ℥ xv. The abdomen was tapped three times, the fluid reaccumulating. The patient got weaker, lost her appetite, and vomited occasionally, and died December 29th, 1895.

For autopsy, see P. M. report, 1896, No. 168.

A Case of Osteitis Deformans.

L. S—, æt. 47, a married woman, was admitted under Dr. Allchin, April 1st, 1895, complaining of pains in all her bones. Her family history was good, except for slight rheumatism on

her mother's side; no family history of phthisis, gout, or cancer. Patient was married at 19, and since has had a very hard life, and been much illtreated, and had bad and scanty food. Her first child was born 1 year after marriage, and died of wasting at 4 months. The second child living and healthy; then she had a miscarriage in the early months, then a living child, followed by another miscarriage. After this she had five healthy children, the last of which was born 15 years ago, since then 3 confinements, the children dying at 7 and 13 months, and 4½ years respectively. The last confinement was prolonged and difficult, but no instruments were used. Menopause 1886. She had facial erysipelas aged 16; acute rheumatism in 1875, being in bed a month. Inflammation of the bowels 1885. She has also been much subject to vertical headaches. About 10 years ago she got a severe pain in the right inguinal region, worse at night, which made her stoop and use a stick when walking; this has continued till the present; was in this Hospital in 1886. In 1893 she first noticed enlargement of the right forehead, which has since increased, and about a year ago pains started in both legs and thighs, and both thighs got larger and more bent. For the last 6 months the left forehead has increased in size; for the last month the patient has been confined to bed on account of the pain when walking. During the course of her illness she has had frequent acute attacks of pain, with swelling of her knees, ankles, and shoulder joints. Her hair has become drier and more brittle during the last 6 months, and has fallen out more than usual. On admission she was rather anæmic and wasted. The vertex of the head was much enlarged, especially on the right side, and the supra-orbital ridge was very prominent; circumference of head round occipital protuberance and lower part of frontal bone was 24 inches, and from one external auditory meatus to the other over the vertex was 15 inches; there is some headache, but no tenderness of scalp. Hair dry and brittle, but not fine. Face not enlarged. The upper part of the left humerus is tender and enlarged. The curves of both clavicles are increased and the bones themselves much thickened. There is much thickening of both iliac crests, and the bones of the left hip-joint are much enlarged and tender. There is slight lateral spinal curvature in the thoracic region. Both femora are much bowed with the

convexity forwards and rather inwards, and they are both very massive, and the internal condyle of the right femur is very prominent. The tibiæ are much thickened and the curvature much increased, with the convexity forwards and outwards. The movements of the knee-joints are much impaired. There is much tenderness and some enlargement of the 1st left metatarsal bone. The arteries are rather hard. Pulse 98, regular, volume fair, easily compressible. Heart normal. Other organs normal. Urine 1030, acid, no albumen or sugar; deposit of urates. Temperature normal. The pains continued to vary, but on the whole improved somewhat with rest, and she left the Hospital on the 24th of June.

Osteitis Deformans.

R. T. M—, æt. 48, an oilman, was admitted under Dr. Hall, March 6th, for deformity and pain in the legs. He said his left leg enlarged 7 years ago and the head 2 years ago. There was no family or personal history of rheumatism, and he showed no signs of syphilis. The head was much enlarged, especially on the right side; the arc from glabella to posterior occipital protuberance being 13 inches on the right side and 12 inches on the left. The face was not enlarged, except for some thickening of the inferior maxilla. The left femur and tibia are much thickened, and are bent in the direction of their natural curves; the right leg is similarly affected, but not to such an extent. Both iliac bones are much thickened, the arms are only slightly affected, but the right clavicle, and apparently the 1st and 2nd ribs, are enlarged. There is also slight angular curvature in the lower dorsal region, and the spines appear thickened. Over all these regions the veins are noticeably enlarged, especially on the legs, and there was much aching pain. The heart appeared dilated, and there was an apical systolic murmur. The arteries very tortuous and rather hard. The urine contained neither sugar nor albumen, and no deposit of phosphates. This patient lost the pains under quinine and iodide of potassium, and left the Hospital improved in that respect.

Polyuria.

Caroline P—, æt. 30, no occupation, had a healthy history except for a fall on head when 7 years old, and a discharge from

the right ear 2 years ago very fœtid in character, and lasting 6 months. About a year ago she suffered from dyspepsia and thirst, the latter symptom increased greatly 6 months ago, and she had frequently to micturate at night; this has continued till the present, and weakness of the legs has come on. She was admitted under Dr. Hall, December, 1895. She was somewhat thin, with very dry skin, suffering from severe thirst, but no increased desire for food. Tongue dry and glazed. Pulse regular, but with no increase of tension. Heart normal, except for accentuation of the second sound at the aortic cartilage. Urine about 80 ozs. a day, pale, sp. gr. 1008, ventral, no albumen, no sugar. She had to micturate about each half-hour, so rest was greatly disturbed. There was no other abnormal feature about her. She was allowed to get up in the day, and took grs. 2 zinc. valerian three times a day. The urine increased in quantity till, on February 11th, 1896, she passed 420 ozs. urine, and it varied between that and 278 ozs.; but on February 16th she was confined to bed, and the urine at once dropped from 328 ozs. to 190 ozs., and continued to drop for a fortnight to 90 ozs., when again it slightly rose to 185 ozs. She left the Hospital, March 21st, 1896. During her stay in Hospital she increased 4 lbs. in weight.

NOTES OF SOME SURGICAL CASES IN THE WARDS OF THE HOSPITAL DURING 1896.

By E. PERCY PATON.

Cerebral Compression; (?) Rupture of Middle Meningeal Artery.—Recovery.

James Callaby, æt. 24, was admitted under the care of Mr. Macnamara on July 18th, 1896, with the history that on July 15th he fell off a dray, striking his head, and causing a scalp wound over the left parietal eminence. He walked to St. George's Hospital to have his head dressed, then went home, and an hour later became unconscious. He remained in the same state for the next 2 days, except that he was somewhat sick on the 16th, and at 2 p.m. on July 18th he was brought here.

He was then unconscious, but could be roused slightly, but only with difficulty. No other objective signs could be found except the slight scalp wound. On the 19th he was slightly less unconscious, and attempted to tell his name and age when asked. On 20th doubtful paresis was discovered of the right arm, which seemed flaccid and cold. Examination of the right arm on the 22nd showed that it was colder than the left, and he was hardly able to move the fingers or wrist, while the left arm was normal. The right leg was also somewhat weaker than the left. The reflexes were normal. No paralysis of face or ocular muscles.

On the 24th some loss of sensation was noticed in the fingers of the right hand. The weakness of the right arm muscles had distinctly improved by the 30th, but some weakness of the right facial muscles was noted.

From this time he continued to improve steadily, so that he went to Swanley on August 11th. In a few weeks he returned with apparently complete recovery from the paresis, and otherwise well, there being no rigidity or other sign of old trouble.

Epithelioma of Floor of Mouth and Jaw.—Operation.—Death.

Victor Fivas, æt. 59, was admitted under Mr. Spencer on February 24th, 1896, complaining of a hard, painful swelling attached to the inner surface of the left side of the lower jaw, and extending into the floor of the mouth, which he stated had existed only a week.

February 25th.—Owing to great tenderness an anæsthetic was given for examination, when an ulcer was found on left side of the floor of the mouth, and of intense hardness and firmly attached to the jaw. Part of it was removed for microscopic examination and proved to be epithelioma.

March 3rd: Operation.—The lingual and facial arteries were first tied in the submaxillary region by a curved incision extending from one angle of the lower jaw to the other, and a vertical incision from the chin to the hyoid bone. The jaw was then divided opposite the second left molar and right canine teeth, and by a transverse incision one inch in front of the epiglottis the tongue, including the ulcer and the attached piece of jaw, were removed without any hæmorrhage. A vertical incision was then made from the left corner of the hyoid over the carotid, and some glands which were felt enlarged were cleaned out.

The subsequent treatment consisted in iodoform dusting and frequent washing with Condy's lotion, and feeding with a feeder with tubing on the spout. He got up on the 2nd day, having then a little cough and a slight rise of temperature. On the 7th day he suddenly felt ill, went back to bed, became cold, and more cough developed, and râles in the chest, and he died just a week after the operation.

Post-mortem.—The skin wound was healed throughout, the stump of the tongue healthy, in process of being covered with mucous membrane. All disease gone. There was chronic bronchitis in both lungs, and a patch of pneumonia in the right.

Abscess in the Neck.—Accidental Rupture of Internal Jugular Vein near the Skull.—Hæmorrhage.—Recovery.

Charles Holwell, æt. 66, hatter, was admitted under Mr. Stonham on October 22nd, 1896, with an abscess under the deep fascia in the upper part of the left posterior triangle, for which no cause could be found.

On October 28th a three-inch incision was made along the posterior border of the sterno-mastoid, opening the abscess. The cavity was then scraped with a Volkmann's spoon, when suddenly a large amount of hæmorrhage was noticed coming from the depths of the wound, which required transverse division of the sterno-mastoid muscle to reach the bleeding point, which was found to be a tear in the internal jugular vein close to its attachment to the skull, rendering it impossible to tie the vessel, the wound was therefore firmly packed with iodoform gauze. The patient meanwhile had become very collapsed, and the pulse very rapid and almost imperceptible, so he was transfused into the right median basilic vein with two pints of normal saline solution, which greatly improved his pulse and general condition. The bleeding came through once in the following night, requiring the wound to be replugged, and again the following morning, when, however, the wound was quite dry. From this time there was no more bleeding, and the patient steadily improved and went out well on November 26th, 1896, with the wound closed.

Fracture.—Dislocation of the Spine; (?) Hæmorrhage into the Spinal Canal.—Paraplegia.—Recovery.

William Fairey, æt. 38, Postal van driver, was admitted under Mr. Bond on April 21st, 1896, with a history of having fallen from the dickey of his van while under the influence of alcohol.

On admission he was perfectly conscious, and able to answer questions rationally. In the lower dorsal region there was some irregularity of the spines of the vertebræ, with swelling over them. This irregularity could not be reduced. He complained very much of pain in both legs, "which felt as if he had a tight elastic stocking on." He was quite unable to move either leg; but sensation of both legs seemed normal. He also had retention

of urine. He was treated with an ice-bag to the spine, water-bed, and the urine drawn off every eight hours.

April 27th.—The patient was rather better, being able to move the left foot, he had, however, some incontinence of fæces.

May 12th.—The urine having become alkaline, the bladder has been washed out for the last 7 days with boracic lotion, since when it has been acid. He is now able to move his left foot well and his right slightly.

June 23rd.—Patient has made unbroken progress. Can move the left leg very well and the right fairly, though it is still rather weak. There is no change in the deformity of the spine.

From this time the condition of the patient steadily improved, so that on July 16th he went home, walking perfectly well except for very slight weakness.

Spheroidal-celled Carcinoma of Left Vocal Cord.—Thyrotomy.—Removal of Left Cord and part of Right.—Recovery.

George Browne, æt. 70, salesman, was admitted under Mr. Spencer on September 24th, 1896. He first came to the Throat Department on July 29th, 1896, complaining of intermittent hoarseness of 3 months' duration. On examination the left vocal cord was found to be fixed and the mucous membrane around infiltrated and swollen, the cord itself being red. The rest of the throat, nose, and chest were normal. There was no evidence of syphilis, but he was treated with hyd. c. creta, gr. iii., and potassii iodidi, gr. xxx. twice a day till September 14th. Meanwhile the conditions became more marked, and the hoarseness permanent. The patient was a cornet player about 20 years ago for 4 years.

On admission the left vocal cord was found to have disappeared, except at its anterior end, leaving an ulcer. Above and below the cord, extending as far as the middle line, the mucous membrane appeared infiltrated and swollen. The left side of the epiglottis was slightly drawn down.

On October 6th an incision was made in the middle line of the neck, extending from the hyoid bone to the third ring of the trachea. The skin was retracted and the structures covering the upper part of the trachea cleaned, and the trachea opened

through the first two rings, and Trendelberg's tampon tube inserted, and the air collar inflated. The crico-thyroid membrane was then divided transversely, and two small sponges attached to silk threads pushed down through this opening into the cricoid ring. The interior of the larynx was then exposed by median division of the thyroid cartilage. On retraction of the alæ a small oval growth, about ¾ in. by ½ in., was seen occupying the anterior two-thirds of the left vocal cord. This was below the mucous membrane and adherent to the left ala of the thyroid cartilage, no ulceration or apparent change in the mucous membrane having taken place over it. The mucous membrane was then painted with 5 per cent. cocaine to allay the cough reflex, and the growth, with the whole of the left vocal cord and anterior third of the right, was removed by incisions carried wide of it. The underlying thyroid cartilage on each side was cauterised with pure carbolic acid. The sponges and tampon tube were now removed, the wound dusted with iodoform, and a warm sponge laid over it, and the patient put back to bed, lying well over to the left side with the head rather lowered, accumulation of mucus being prevented by frequent removal with a sponge. The subsequent treatment consisted in blowing in iodoform every two or three hours, just at the end of the act of deglutition, after clearing away the mucus and putting in dilators occasionally to aid the process, and also that of coughing up the mucus.

He was fed at first by enemata, but was able to swallow milk and water at the end of the second day, from which time he made an uninterrupted recovery. Enemata were left off on October 9th, and on the 24th the external wound was almost closed. Laryngeal examination showed the larynx free, no sloughs or mucus; granulations healthy looking on left side. Right ventricular band a little swollen.

He was discharged very well on November 11th, 1896. Microscopic examination of the specimen showed the case to be one of spheroidal-celled carcinoma.

Subglottic Sarcoma.—Complete excision of Larynx and part of Trachea.—Recurrence in Glands.

Jane Carter, æt. 43, single, paper colourer, was transferred from Dr. Hall's care, under whom she had been, suffering from

laryngeal dyspnœa, since August 19th, 1896, to Mr. Spencer's care on September 8th. There was then very laboured breathing and a good deal of cyanosis. On examination of the larynx there was some chronic hypertrophic laryngitis, while on the right side, below the cords, was a thick mass apparently lying against the right inner aspect of the cricoid, but not mobile. Over the course of the right carotid was also a hard mass about an inch in diameter, to which the skin was not adherent, and which seemed freely movable, on deeper structures. Tracheotomy was performed in the usual way on September 8th with complete relief to the dyspnœa. On the 11th the mass below the vocal cords was more clearly seen blocking the lower opening of the larynx.

On September 22nd the tracheotomy wound was enlarged and several small pieces of the growth were removed with a nasal punch. This so improved the breathing that the tracheotomy tube was removed. Microscopic examination showed the removed pieces to be small round-celled sarcoma.

On September 30th the following note of laryngoscopic examination was made:—Subacute laryngitis, subglottic infiltration but no projecting masses. There was no dyspnœa or dysphagia. Wound almost closed, but the mass over the carotid was larger and harder, though still mobile. Patient's general condition better.

On October 6th the whole larynx was excised in the following manner:—A vertical incision was made from the hyoid bone downwards in the middle line, but carried round the old wound on each side. At the upper and lower ends of this incision, two inch transverse cuts were made and flaps of skin reflected outwards on each side. The larynx was then cleared; but parts of the sterno-hyoid and thyroid muscles were left on it. The trachea was now cut through just below the cricoid and freed from its attachment to the œsophagus, silk threads having been previously attached to its upper part by which it could be drawn forward. The larynx was then freed from its attachments from below upwards, and finally removed by division of the superior thyroid cornua. Some large glands were now dissected from the front of the carotid sheath; the opening into the laryngo-pharynx closed by sutures, and the skin flaps stitched together after dusting with iodoform. The trachea was fixed in the lower

part of the wound with sutures, small strips of gauze being packed in at each lower angle for drainage. No tracheotomy tube was put in.

The patient did very well after the operation. Until October 11th she was fed entirely by enemata, which she retained well; she then began to have eggs beaten in milk, etc., by means of a tube passed into the œsophagus from the mouth, at the same time the rectal feeding was continued. The wound broke down somewhat in front, leaving an opening through into the upper part of the pharynx, which, however, did not prevent her commencing to swallow jelly by the mouth on October 27th, followed by minced meat and potato the next day, and on November 8th she began to feed permanently by mouth. This opening gradually contracted to a very narrow track. It was found more convenient as the case went on to use a rubber tube for the tracheal opening than to leave it without one.

On December 1st it was noted that her general condition was very good, much better than before the operation. She had a distinctly marked articular voice, which, with care and attention, could usually be understood without watching the lip movements. It had a very guttural sound, and seemed to be rapidly improving.

Examination of the neck, however, revealed a hard mass over the right carotid, more or less fixed. On December 15th this mass was explored and some of it removed; but it was found to be a recurrence which had extended widely and irremovably along the carotid sheath and jugular vein, so the wound was closed, and this remains her condition at the time of writing, December 18th.

Acute Suppurative Peritonitis.—Diplococcus in the Pus.—Death.

Edith Mary Horby, æt. 5, admitted under Mr. Macnamara on October 13th, 1896. She was taken ill suddenly on October 11th with abdominal pain and vomiting and a high temperature. The bowels were open on October 9th, and again (but slightly) after enemata on October 12th. On admission the eyes were sunken and a pink flush on each cheek. Pulse 150, very small, almost running. Respiration mainly costal. Abdomen full but

not distended, slightly tender; nothing abnormal could be discovered on palpation or percussion. The child vomited several times after admission, but not fæcal. Temperature 100°. The bowels were not open after enemata. On the 14th child got gradually worse, and died in the afternoon.

Post-mortem.—General purulent peritonitis. No organic lesion. A diplococcus like pneumonococcus found in the pus. No other lesion could be found to account for the peritonitis.

Intestinal Obstruction due to Adhesion between a Mass of Tubercular Mesenteric Glands and Omentum.—Laparotomy.—Death.

Frank Norris, æt. 15, was admitted under the care of Mr. Stonham on July 17th, 1896. He stated that 12 months ago he had an attack of indigestion, when he had sudden abdominal pain, vomiting, and constipation. He got well again in a week. Since then he has been quite well till July 15th, 1896, on the evening of which day he took a dose of salts. He was at work all the next day; but on the night of the 16th he woke up suddenly with an attack of abdominal pain, and almost immediately he vomited. His bowels, he says, have not been open nor has he passed flatus since the morning of the 16th.

On admission, at 3.45 a.m., he was very collapsed, and vomited once in the surgery. On examination of the abdomen it was found full but not distended; but on the left side of, and on a level with, the umbilicus, was seen an obvious swelling, which on palpation was found to be of softish consistency, slightly elastic and tender, and about the size of a large hen's egg; it was slightly movable from side to side. The percussion note over it was impaired. The abdomen seemed otherwise normal. Rectal examination gave negative results.

His condition remained the same till midday, but there was no more vomiting. It was then decided to explore his abdomen, which was done by a vertical incision made over the tumour, which was exposed as a smooth, rounded mass, about the size of a cricket ball, occupying the mesentery for a considerable extent. The intestines were but little distended. The swelling was thought to be a sarcoma and irremovable, so the abdomen was closed. Subsequently the boy got steadily worse, the

abdomen became distended, some vomiting set in, and he died July 23rd.

Post-mortem.—The stomach and small intestines were greatly distended, the colon empty; some general peritonitis, with lymph gluing the coils together. The mesenteric glands enlarged, forming a mass about the size of an orange, containing grumous fluid (broken down pus and cretaceous material). Omentum adherent to the front of the mass, and between the two the gut passed, which was thus nipped. The wall of the gut in one or two places was gangrenous right through where the coils were adherent to each other. Nothing else noteworthy. Microscopic examination of mesenteric glands showed tuberculosis, with calcification of some of the infiltrated products.

Hydatid Cysts of Liver and Pleura.—Treatment by Operation.—Recovery.

Miss D. H. L—, æt. 20, was admitted under the care of Mr. Spencer on May 11th, 1896, with the history that she had an attack of pleurisy on the left side at the beginning of 1895, which got quite well; but during the last 5 or 6 months she had been ailing, having no special symptoms except loss of flesh and increasing weakness.

Physical examination showed the following condition. Chest, on percussion, right side, liver dulness increased almost up to the nipple line; left side, note impaired at the base behind, anterior to the posterior axillary line and below the nipple level, note dull. Auscultation normal, except over the dull area, where no breath sounds were heard, and the vocal vibrations were absent. Heart—no increase of dulness to the right and the sounds normal. In the abdomen, on the left side, continuous with the dulness at the left base, was a rounded, prominent dull area, extending almost to the umbilicus; fluctuation was easily felt in this swelling. On the right side the liver dulness extended as far down as the umbilicus. But the consistency of the mass could not be made out, owing to tenderness and rigidity of the muscles.

On the 11th of May a vertical 2 in. incision was made over the centre of the fluctuating swelling. On cutting through the abdominal wall serous fluid escaped in large quantity, and a

large cavity was opened, extending well up into the chest. It was lined with a cyst wall, which was easily enucleated. A counter-opening was made between the ribs behind, into which a tube was put, but the lung soon expanded over the opening, The anterior wound was closed with silk sutures.

After the operation the patient did well, and went out on June 6th with both wounds closed, the physical signs on the left side having cleared up. The condition on the right side, however, remained practically the same, except that it was now possible to clearly feel the lower edge of the liver moving on respiration, and corresponding to the lower margin of the dull area, which reached almost to the umbilicus.

She was re-admitted on August 18th with the condition practically unchanged, and on the 19th an incision was made from the rib margins vertically down through the right rectus, opening the abdomen to as low down as the umbilicus. On raising the liver and pushing the intestines to the left, a large cyst was exposed lying behind the peritoneum and below the liver. The peritoneum over it was then incised and the parasitic cyst washed out with a stream of water. A further cyst could then be felt higher up in the liver out of reach of incision, so the peritoneum was stitched over the cavity and the abdominal wound closed. An incision was now made over the 10th rib behind and about an inch of it removed; the diaphragm was then stitched to the upper edge of this wound and then divided, exposing the upper surface of the right lobe of the liver, which was tense but looked normal; this was then tapped with a trocar and cannula, permitting a large amount of fluid to escape. The opening thus made was now enlarged and the wound stuffed with gauze. The operation lasted 2 hours.

The patient was doing well next day, and the gauze plugs were removed from the posterior wound and replaced by a tube. The anterior wound healed well except for a little suppuration along the sutures, but the posterior wound continued to discharge pus and shreds for some time, but gradually closed.

On her discharge on October 10th patient was very well. Wounds were closed, but dulness on the right side extended from the 4th rib to one-third of the way to the umbilicus in the sternal line, and well below the costal margin in the nipple line.

SARCOMA OF RIGHT KIDNEY.—ABDOMINAL NEPHRECTOMY.—RECOVERY.—RECURRENCE.

Alice Guntry, æt. 5½, admitted under the care of Mr. Spencer, July 9th, 1896, with a history that a swelling appeared on the right side of the abdomen a year ago. She was taken to Great Ormond Street, but was advised against operation. Lately, the tumour has rapidly increased.

On examination a tumour of rather varying consistency, but generally elastic, and in some places fluctuating, occupied the right loin and lumbar region as far forwards as the umbilicus, extending upwards under the lower ribs and downwards so as to bulge in the hypogastrium, below the umbilicus. A certain amount of movement could be obtained in the mass. The cutaneous veins were dilated over it; nothing abnormal could be felt per rectum.

Operation—July 14*th.*—An incision was made vertically through the right rectus from the umbilicus nearly to the pubes. On opening the peritoneum some straw-coloured fluid escaped. Pushing back the omentum revealed the tumour covered by parietal peritoneum, in which were large veins. On incising this the finger was easily able to separate the capsule of the tumour. A horizontal incision was then made outwards to the border of the quadratus lumborum and the peritoneum separated from the anterior and external surface. The ureter was found very small in front and below, and tied off separately. The pedicle was found at the inner anterior and upper part of the tumour containing a large vein, but the renal artery was not felt. The tumour was easily separated behind from the muscle and inferior vena cava, and above it was separated from the liver by the peritoneal capsule. The pedicle was tied by interlocking ligatures, and some veins which had been clamped were tied. A small rubber drain was inserted in the outer end of the wound. The weight of the tumour was 4 lbs.

July 15*th.*—The child has been doing well; no sickness; a little faintness. The dressing has required to be packed. Half a teaspoonful of milk was given every half-hour from the time of operation; to-day milk has been given less often and in larger quantities. Has slept well.

Tube taken out on the 16th. From this time the child

progressed satisfactorily, and went out with the scar sound on August 11th. The microscopic report from Dr. Hebb as to the nature of the tumour was, "A mixed type of neoplasm, masses or areæ of sarcoma cells containing a greater or less number of tubules made up of bastard columnar epithelium. The sarcoma cells, round to oval or fusiform, small. In places the areæ seem composed of tubules jammed together."

The patient was re-admitted on October 9th, when there was found to be a mass corresponding to an enlarged spleen, forming an elastic tumour, extending below the ribs midway to the pubes. The site of the former kidney was occupied by an indurated mass not yet causing the abdomen to project on that side. No evidence of involvement of liver and lungs. Was discharged, without further interference, October 22nd.

Vesical Calculus.—Lithotrity.

Alice Moore, æt. 44, was admitted under Mr. Stonham on May 16th, 1896. The patient stated that last December she consulted a doctor for difficulty and occasional pain during micturition, especially whilst straining. The urine, she said, was thick and "full of slimy stuff." She was treated for "inflammation of the bladder," and after a week or two began to suffer from incontinence. This had continued till a few weeks back, when she consulted another doctor, who told her she had a vesical calculus, and made an attempt to remove it without success.

On admission the patient, who was weakly looking and anæmic, complained of urine running away without her control, and some pain. The urine was alkaline, and contained a twelfth albumen, pus in small amount, no blood, but oxalates and phosphates. The same evening she passed a little blood.

On May 19th she was sounded, when a stone was clearly felt and heard. On May 27th the stone was crushed under an anæsthetic at one sitting. It was difficult at first to seize owing to its size, and to crush owing to its hardness. The fragments were removed with an evacuator, when they were found to weigh 2¾ ozs. The stone was laminated, crusted outside thinly with phosphates, and otherwise uratic. Subsequently she had no incontinence, passed a few more fragments

of stone by the urethra, and went out on June 10th feeling perfectly well.

Chondro-Sarcoma of Scapula (left).—Amputation of Fore-Quarter.—Recovery.

Henry Bennett, æt. 37, signalman, was admitted under Mr. Stonham on May 27th, 1896, with a swelling of the left scapula.

He first noticed pain in the left arm about 18 months before admission; but at that time no tumour was found, and he was treated for rheumatism. The pain still continued more or less, until about 6 months later a swelling was noticed over the left shoulder blade; this has steadily increased to its present size.

On examination the patient seemed a healthy man in every respect, excepting for a swelling of the left scapula. This swelling appeared to have mainly involved the infraspinous and subscapular fossæ, pushing up the spine, but it had also invaded the supraspinous fossa and the inferior angle. The whole tumour was about the size of an ordinary melon. It was irregular in shape, having on it several bosses, one of which in front pushed forwards the axillary vessels. The skin was not involved, and the whole growth was freely movable on subjacent parts. No wasting or other trouble in the arm was observable, and no glandular enlargement.

On June 2nd the arm and scapula were removed in the following manner:—The ordinary incision was first made for ligature of the first part of the axillary artery, and the vessel tied. The external end of this incision was then prolonged over the acromion process down the posterior axillary fold to 2 ins. below the inferior angle of the scapula. Starting from the same anterior incision another was made down the anterior axillary fold to join the previously described incision below. The clavicle was then divided, and the scapula and arm rapidly removed. The posterior scapular artery was easily secured, and there was very little bleeding. The wound was closed and a drainage tube put in. There was a good deal of shock after the operation, requiring brandy, &c., but he soon rallied and went on well, except for some suppuration under the extensive flap, and was discharged on July 27th. The wound was then sound. The

growth proved to be a chondro-sarcoma, with much fibrous tissue.

Sarcoma of the Femur with Spontaneous Fracture.

Elizabeth Pearce, æt. 27, married, was admitted under the care of Mr. Macnamara on December 15th, 1895, with the following history:—She was walking to-day, carrying rather a heavy child, when she suddenly felt something give way in her left thigh. She did not fall, but was unable to walk farther owing to pain in the thigh. She states that the left thigh has been increasing in size during the last 6 months.

On admission a swelling was found at the junction of the middle and lower thirds of left femur. It was immovable, irregularly nodular, non-fluctuating, and non-pulsating, it was very painful to pressure, and a slight sensation of cracking was felt over it. Immediately above the swelling was a simple fracture. There were enlarged glands in both groins, but no enlargement of lumbar glands could be felt, although the omentum could be distinctly felt as a nodular mass.

The family history was quite unimportant.

The leg was put up in a long Liston splint with a weight extension.

December 24th.—The thigh was amputated at the upper third, but the bone was not quite free from sarcoma tissue.

January 18th.—There was recurrence noted in the stump, which looked sloughy and unhealthy, and the inguinal glands were markedly large.

February 8th.—Patient went out obviously going downhill from secondary growths.

Periosteal Sarcoma of Right Femu.—Amputation at Hip.—Recovery.

Frank Sturgess, æt. 13, was admitted on May 5th, 1896, under the care of Mr. Stonham, with the history that 6 weeks before he had noticed pain in the right knee; he saw a doctor, who gave him some liniment; a week later he noticed a swelling in the thigh, which was at first hard, but has gradually become softer.

On examination a hard swelling was found surrounding the middle of the right femur on its inner anterior and outer aspects. In front it displaced the artery, but the posterior part of the bone seemed free. It was firmly fixed to the bone. The skin over it was normal, and there was no wasting of the limb, nor affection of either hip or knee-joint. The inguinal glands were enlarged in each groin, and on the affected side there was deep fulness in the iliac fossa. Movements at the hip-joint were free.

May 13*th*.—Right leg amputated at the hip-joint. An Esmarch's hip tourniquet was applied with a pad under it over the femoral artery, and the leg removed by the oval method. The incision commenced 2 ins. above the great trochanter, and was carried down vertically for 6 ins. below it before being continued transversely. The transverse cuts extended at once to the bone, which was disarticulated before taking up any vessels. Only a very little blood was lost. The boy made an uninterrupted recovery, and went home June 13th.

The specimen was one of sub-periosteal sarcoma; the bone was so thin in connection with it that a fracture took place at the operation.

Periosteal Sarcoma of Right Femur.—Amputation at Hip Joint.—Recurrence.—Death Nine Months later.

George Jennings, æt. 14, was admitted into St. Luke, under the care of Mr. Bond, on February 5th, 1896. He first noticed pain and then swelling of the lower part of the right thigh 5 weeks before admission. On admission there was very extensive swelling of the lower third of the right thigh, extending down as far as the head of the fibula. The limb in this situation was fairly uniformly enlarged to a maximum circumference of 20 ins. The limits of the swelling could not be clearly defined, and it was firmly fixed to the subjacent bone; it was somewhat, but not very, tender to the touch, and in consistency was generally doughy, except at one spot to the outer side of the patella where fluctuation could be felt. The skin was reddened over it but not adherent, and the superficial veins were enlarged; considerable œdema of the right calf was present, and the patient was rather emaciated. On February 12th, 1896, the

was amputated at the hip by external and internal flaps, and the boy subsequently made a satisfactory recovery and went out on March 25th.

He was re-admitted on October 25th with recurrence. The stump was somewhat œdematous, but it seemed doubtful if there was any new growth here, but the lower abdomen was occupied by a large solid mass fixed below to the pelvis, and extending upwards as far as the umbilicus. The rest of the abdomen was full of fluid, there was also some dulness over parts of the thorax. The abdomen was tapped several times, but the boy went steadily downhill, and died on November 18th, 1896.

Post-mortem.—Abstract. The abdomen was two-thirds filled with a cystic growth, weighing 101 ozs., and attached to, though not actually growing from, the right os innominatum. Nothing else noteworthy in the abdomen. In the chest some pleural adhesions; many deposits the size of walnuts in the lungs, some apparently mixtures of cartilage and bone, some soft. Right lower bronchus filled with sprouting growth. Microscopically—The lung masses were sarcomatous, with spindle cells as basis, but forming a strong, tough, fibrous tissue, with myxomatous and hyaline degeneration in places. Numerous blood-vessels. In places there are areæ of trabeculæ, infiltrated with lime salts, but no true bone, although in general appearance there is some resemblance to cancellous tissue (pseudo-ossification).

Popliteal Aneurysm.—Spontaneous Cure.

Henry Clements, labourer, æt. 40, was admitted under Mr. Stonham, June 1st, 1896. He stated that he "sprained his left knee" in February, 1896, but it soon got well, and gave him no trouble till the middle of May, when he began to feel a throbbing pain behind his left knee, where he also noticed a swelling. There was no clear history of syphilis, but he had [illegible] from rheumatic fever. On examination of the left [illegible] swelling which pulsated freely, pulsation [illegible] about that of a tangerine orange. The [illegible] pressure on the common femoral, and [illegible] was somewhat reduced in size. A [illegible] over the swelling. No pulsation

could be felt in the left posterior tibial artery. No other disease could be found in any other viscus or artery.

On June 3rd the leg was bandaged from the toes to above the knee with a domett bandage, and kept in an extended position by means of sand-bags, and on June 9th pulsation was found to have ceased. The tumour had reduced to the size of a walnut, and felt hard and solid; slight pulsation could be felt of enlarged arteries on the inner and outer borders of the patella, while deep in the ham to the outer side of the semi-membraneous tendon what appeared to be the main artery could be felt pulsating. No pulsation could be felt in either the anterior or posterior tibial on the left side.

There was no recurrence of pulsation or other trouble, and the patient was discharged well on July 3rd, 1896.

Epithelioma of Scrotum.—Glands in Groin.—Removal.—Recovery.

Henry Stoker, gas stoker, æt. 38, was admitted under Mr. Bond on May 11th, 1896. He stated that he had nothing to do with soot, but only with coal and coke dust. He first noticed a small wart on the scrotum 4 months ago. It did not increase in size for 2 months. It then got hurt with a piece of coke, making a small sore, which did not heal but began to extend until it reached its present size, though lately its rate of increase has been more rapid. He noticed a lump in the left groin only a few days ago.

On admission there was a circular ulcer about the size of half-a-crown situated on the lower and anterior part of the left half of the scrotum. The edges were irregular and slightly everted, the base irregularly nodular with unhealthy granulations. Continuous with the ulcer was a tumour a little larger than the ulcer, apparently about half-an-inch thick, and of hard consistency. It was freely movable over the testes, to which it was not attached. Some large glands could be felt in the left groin, hard and shot-like, and some very slightly large on the right side.

On May 11th the tumour and ulcer were removed and the inguinal glands on each side. The wounds closed without event, and the patient was discharged apparently well on May 27th. The microscope showed the tumour to be epitheliomatous.

"BAKER'S CYST" OF RIGHT LEG.—EXCISION.—RECURRENCE.—DRAINAGE.

Charles Haltoe, foreman, æt. 38, was admitted under Mr. Spencer, July 24th, 1896. He stated that he had suffered from "rheumatic pains" in the right leg for some months, but had only noticed a swelling in the calf of the right leg for 3 weeks.

On examination there was found a swelling in the right calf about the size of a small cocoa-nut, which extended up into the lower part of the popliteal space. It fluctuated freely, and the skin over it seemed thin. There was no pain or tenderness. The right knee contained a little fluid, and there was occasional cracking on movement; but no pain and no lipping of the bones could be clearly made out. No fluid could be squeezed from the joint into the swelling or *vice-versâ*. There was no special alteration to be found in the swelling on flexion or extension of the joint.

On July 28th the major part of the cyst was dissected out; it lay very superficially, but there was a deep prolongation up under the inner head of the gastrocnemius, but no communication could be found with the joint. What could not be removed was scraped and the wound closed. The cyst contained a brown dirty-coloured blood-stained fluid. The cyst wall was microscoped by Dr. Hebb, and consisted of "two layers of spindle cells arranged regularly and parallel; outer layer thicker and containing a few degenerated muscle fibres; intermediate layer one of spindle cells containing, and indeed chiefly consisting of, blood-vessels. No evidence of malignant disease. Fibrinous exudation on inside of cyst wall." The man was discharged apparently well on August 20th, 1896.

The patient was re-admitted on October 12th, 1896, complaining of a swelling at the upper part of the old operation scar. On examination a fluid swelling about the size of a walnut was found at the upper and inner part of the old scar, at the lower and inner part of the right ham. The swelling could only be made to vary slightly in size by pressure or flexion of the knee. The knee-joint contained a considerable quantity of fluid, and there was lipping now noticed of both patella and tibia.

On October 14th an incision was made over the swelling and as much cyst wall as possible excised. A canal was then found

passing up under the inner head of the gastrocnemius, and on flexion of the knee a considerable quantity of fluid escaped from the knee-joint. A tube was put in and the wound closed. The tube was removed on the 20th, and the wound closed soundly without event, and the man went out on October 31st feeling well, but with still a little fluid in the right knee-joint.

Fracture of Patella.—Immediate Wiring.—Satisfactory result.

Henry Phillips, labourer, æt. 34, was admitted under Mr. Stonham on May 4th, 1896, with a transverse fracture of the left patella, and a good deal of effusion into the joint. A few hours after the injury the patella was wired by Barker's method. Half-inch incisions were made above and below the patella through the ligamentum patellæ and the quadriceps extensor tendon; a Barker's needle was passed from below and out at the upper incision behind the patella, and a piece of wire drawn through, and by the same method the upper end was drawn down over the front of the patella. The wires were then twisted tight after having squeezed out all blood and fluid from the joint. The bony fragments came into good apposition.

Friction of the joint was commenced next day, but there still continued to be some swelling, and two ounces of blood-stained serum were removed by aspiration on May 8th and an ice-bag had to be applied. At the end of a fortnight passive movement was commenced. On May 27th patient began to flex his leg himself, and he went out with very fair movement; able to walk with no apparatus June 24th.

Abscess in Lower End of Tibia.—Trephining.—Cure.

Stanley Berry, seaman, æt. 23, was admitted under Mr. Macnamara on May 21st, 1896. He stated that he had had a swelling on the front and inner side of his right ankle since he was 12 years old. Four years ago it was very painful and swollen, and laid him up for 4 weeks. Since then it has given him no trouble till the last few weeks, when it has again become swollen and painful. On examination there was found a firm, somewhat flattened, very tender swelling involving the

inner right malleolus and extending for about 3 ins. up the inner surface of the shaft of the tibia. The skin over the swelling was normal, and the movements of the ankle smooth and painless. On May 26th an incision was made over the swelling, and the periosteum raised and the bone trephined with a half-inch trephine, which let out about an ounce of pus from a smooth-lined cavity, which contained no sequestrum. The cavity was irrigated and packed with gauze. The packing was continued and the cavity filled up, and the man went out well on July 31st, 1896.

MEDICAL REGISTRAR'S REPORT FOR THE YEAR 1895.

By Dr. PARKINSON.

Number of patients in the Hospital on Jan. 1st, 1895		75
" " " Dec. 31st, 1895		72
Admitted to Medical Wards during year 1895		1,037
Of these—Males	537	
Females	500	
Average number of patients in Hospital during ¾-year		73·12
Average stay in Hospital of each patient		19·55 days
Recovered or relieved		678
Males	326	
Females	352	
Unrelieved, including those sent to Surgical or Obstetrical Wards		67
Males	45	
Females	22	
Died		89
Males	48	
Females	41	

The mortality during the year was 8·67 per cent.

Table A.

Disease.	Jan. to March.	April to June.	Oct. to Dec.	Sex. Males.	Sex. Females.	Sex. Total.	Age. Under 5 yrs.	Age. 5—10.	Age. 10—20.	Age. 20—30.	Age. 30—40.	Age. 40—50.	Age. 50—60.	Age. Over 60.	Result. Death. M	Result. Death. F	Result. Unrelieved. M	Result. Unrelieved. F	Result. Relieved. M	Result. Relieved. F
General Diseases:																				
Group A:																				
Scarlet fever	5	3	...	5	3	8	...	...	2	4	2	...	...	...	...	...	4	3	1	...
Measles	1	...	2	2	1	3	1	1	...	...	...	...	...	...	1	...	...	...	1	1
Enteric fever	24	7	3	17	17	34	1	4	8	11	7	3	...	...	...	2	...	...	17	15
Diphtheria	9	8	9	14	12	26	20	2	...	3	...	1	...	...	10	5	4	2	4	6
Influenza	43	1	...	20	24	44	8	...	13	13	4	6	...	...	...	1	...	...	20	23
Pertussis	3	1	1	1	4	5	2	3	...	...	...	...	...	...	...	1	1	...	...	3
Erysipelas	2	...	3	3	2	5	1	1	...	...	1	2	...	...	...	...	...	...	3	2
Febricula	3	...	...	...	3	3	3	...	...	...	...	...	...	...	...	...	...	...	...	3
Intermittent fever	1	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Pyæmia	...	...	1	...	1	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...
Congenital syphilis	2	...	...	1	1	2	2	...	...	...	...	...	...	...	...	...	...	...	...	1
Acquired "	6	...	...	5	1	6	1	...	1	2	1	1	...	...	...	...	...	...	5	1
Gonorrhœa	...	...	1	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...
Gonorrhœal arthritis	2	...	1	3	...	3	...	...	...	2	...	1	...	...	...	...	1	...	2	...
Parotitis	...	1	1	2	...	2	...	...	...	...	1	1	...	...	...	...	...	...	2	...
Tetanus	1	...	...	1	...	1	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Cerebro-spinal fever	...	1	...	1	...	1	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Group B:																				
Poisons:																				
Alcohol	2	1	3	4	2	6	...	...	...	3	3	...	...	...	...	...	1	...	1	2
Lead	...	3	1	4	...	4	...	...	...	1	1	1	1	...	...	...	...	...	4	...
Group C:																				
Developmental:																				
Debility	2	...	1	1	2	3	...	1	...	...	...	2	...	...	...	...	...	...	1	2
Marasmus	2	3	3	6	2	8	7	...	...	...	1	...	...	...	...	...	...	...	6	2
Group D:																				
Acute rheumatism	8	5	4	18	9	17	...	1	6	9	1	...	...	...	...	...	...	1	8	8
Subacute "	4	9	12	13	12	25	...	3	6	5	3	5	...	...	...	...	...	...	4	9
Chronic "	1	...	3	2	2	4	...	1	...	1	...	1	...	1	...	...	...	...	2	2
Gout	3	3	...	5	1	6	...	...	...	...	2	2	...	2	...	...	...	...	5	1
Osteo-arthritis	1	1	...	...	2	2	...	...	1	...	...	...	1	...	...	...	...	...	...	2
Tuberculosis	7	4	5	6	10	16	7	4	4	...	...	1	...	...	3	3	...	1	3	5
Rickets	1	1	...	1	2	2	2	...	...	...	...	...	...	...	...	1	...	...	1	...
Anæmia	13	8	9	4	26	30	3	...	11	14	3	1	...	...	...	...	2	...	2	26
Diabetes	3	1	1	2	3	5	...	...	1	2	1	1	...	...	1	1	1	1	1	1
Purpura	...	1	...	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...
Acute rickets	1	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Lymphadenoma	1	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	Oct. to Dec.	Sex.			Age.								Result.					
				Males.	Females.	Total.	Under 5 yrs.	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved.		Relieved.	
															M	F	M	F	M	F
NERVOUS SYSTEM:																				
Brain:																				
Cerebral hæmorrhage	1	1	2	3	1	4	...	...	...	...	1	1	...	2	...	1	...	...	2	1
Hemiplegia	1	4	1	4	2	6	...	...	...	...	...	2	3	1	...	1	...	...	4	1
Tumour	...	1	...	1	...	1	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Abscess	...	1	...	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Cerebro-spinal fever	3	1	...	3	1	4	2	...	...	...	1	...	1	...	...	...	1	...	2	1
Cord:																				
Anterior poliomyelitis	...	1	1	1	1	2	1	...	...	1	...	...	...	...	...	...	1	1	...	...
Spastic paralysis	2	2	1	1	4	5	1	...	...	1	1	1	1	...	...	...	1	1	3	...
Tabes dorsalis	3	...	3	6	...	6	...	...	...	...	4	1	1	...	...	1	...	5	...	...
Progressive muscular atrophy	2	...	1	2	1	3	...	...	1	...	1	1	...	...	...	...	...	...	2	1
Various:																				
Sciatica	2	1	1	3	1	4	...	...	...	1	1	1	...	1	...	...	...	...	3	1
Peripheral neuritis	3	...	2	4	1	5	...	...	...	1	3	1	...	...	...	...	...	...	4	1
Diphtheritic palsy	...	3	...	2	1	3	3	...	...	...	...	...	...	...	...	1	...	...	2	...
Laryngismus	1	...	...	1	...	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...
Epilepsy	4	1	1	2	4	6	1	2	1	1	...	...	...	1	...	...	...	...	2	4
Infantile convulsions	1	...	1	2	...	2	2	...	...	...	...	...	...	...	...	...	...	...	2	...
Chorea	9	5	4	4	14	18	9	7	1	1	...	...	...	...	...	...	...	1	4	13
Hysteria	8	4	1	2	11	13	...	3	2	3	5	...	...	...	...	...	1	...	1	11
Neuralgia	...	1	2	...	3	3	...	1	...	1	...	1	...	...	...	...	...	...	...	3
Neurasthenia	...	1	2	2	1	3	...	...	...	1	1	1	...	...	...	...	...	2	1	3
Torticollis	...	1	...	...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	1	1
Trismus	...	1	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	1	...	1
Raynaud's disease	...	...	1	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Cerebral syphilis	...	...	2	2	...	...	...	...	...	1	1	...	...	...	...	...	2	...	...	...
Mental:																				
Dementia	...	1	...	1	...	1	...	...	...	...	...	1	...	...	...	...	1	...	...	...
Idiocy	...	...	1	1	...	1	...	...	1	...	...	...	...	...	...	...	1	...	...	...
Hypochondriasis	1	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...
CIRCULATORY SYSTEM:																				
Heart:																				
Fatty heart	...	...	1	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...
Dilated "	3	1	2	2	5	7	1	...	...	...	2	2	2	...	1	...	...	...	4	...
Mitral stenosis	3	1	4	3	5	8	...	3	3	1	1	...	...	...	1	2	...	...	2	4
" regurgitation	7	7	5	12	7	19	1	3	3	4	3	4	1	...	...	...	1	...	11	6
" double	5	3	2	6	4	10	...	...	5	1	4	...	...	...	...	1	...	...	6	3
Aortic stenosis	...	1	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1	...
" regurgitation	1	3	...	4	...	4	...	...	...	...	3	...	1	...	...	...	...	...	4	...
" double	2	7	10	15	4	19	...	...	4	6	3	2	2	2	...	...	...	...	15	4

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	Oct. to Dec.	Sex.			Age.								Result.					
				Males.	Females.	Total.	Under 5 yrs.	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved.		Relieved.	
															M	F	M	F	M	F
CIRCULATORY SYSTEM:																				
Heart—contd.																				
Pericarditis	3	1	1	2	3	5	...	3	1	...	...	1	...	...	...	1	...	...	2	2
Congenital morbus cordis	1	1	1	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Angina pectoris	1	1	1	2	1	3	...	...	1	1	1	...	...	...	...	1	...	...	2	...
Arteries:																				
Thoracic aneurysm	2	2	2	5	1	6	...	...	2	2	...	...	...	...	1	...	...	1	3	...
Abdominal "	...	...	1	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...
Phlegmasia alba dolens	1	...	...	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Pulmonary embolism	1	...	...	...	1	1	...	...	1	...	...	...	...	...	...	1	...	...	...	...
Phlebitis	1	1	...	...	2	2	...	1	...	1	...	...	...	...	...	...	...	...	...	2
RESPIRATORY SYSTEM:																				
Acute laryngitis	4	...	1	3	2	5	1	1	...	1	1	1	...	...	...	...	...	...	3	2
Chronic "	...	...	...	2	...	2	1	...	...	...	1	...	...	...	...	...	...	...	2	...
Stenosis of larynx	1	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	1	...	...	...
Laryngeal palsy	...	...	2	...	2	2	...	...	1	1	...	...	...	...	...	...	...	...	...	2
Bronchitis, acute	8	2	...	5	5	10	3	1	1	1	1	1	1	1	1	...	1	...	5	4
" chronic	12	...	6	9	9	18	7	1	...	2	3	2	3	...	...	...	1	...	8	10
Bronchiectasis	1	2	...	1	2	3	1	...	2	...	...	...	...	...	1	...	...	1	...	1
Lobar pneumonia	32	23	12	42	27	69	20	10	10	15	11	4	2	...	3	2	...	...	35	27
Lobular "	7	10	8	15	10	25	20	5	...	...	...	...	...	...	4	2	...	...	11	5
Phthisis	28	30	20	56	22	78	1	2	6	22	22	8	6	2	7	3	1	1	43	17
Malignant tumour of lung	1	2	2	5	...	5	...	...	...	...	2	2	...	1	1	...	1	...	[illegible]	...
Emphysema	10	4	5	14	5	19	...	...	...	1	7	2	2	7	...	1	...	...	14	4
Pleural effusion	4	12	5	14	7	21	2	2	3	5	6	2	1	1	...	...	...	...	16	4
Pleurisy sine effusion	2	1	6	5	4	9	...	...	1	4	1	2	1	1	...	...	...	...	4	4
Empyema	2	...	...	2	...	2	...	...	...	1	...	1	...	...	...	...	...	...	1	...
Asthma	2	1	...	2	1	3	...	...	...	1	...	...	2	...	...	...	...	...	2	1
DIGESTIVE SYSTEM:																				
Pharynx:																				
Pharyngitis	...	...	4	2	2	4	...	1	1	1	1	...	...	...	...	...	...	...	2	2
Tonsillitis	19	6	4	17	12	29	3	5	4	10	1	1	...	...	...	...	...	...	15	12
Œsophagus:																				
Malignant tumour	1	...	...	1	...	1	...	...	...	...	...	1	...	...	...	...	1	...	...	...
Stomach:																				
Dyspepsia	4	3	2	2	7	9	...	1	2	1	1	3	1	...	...	...	...	...	2	7

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	Oct. to Dec.	Sex.			Age.								Result.					
				Males.	Females.	Total.	Under 5 yrs.	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved.		Relieved.	
															M	F	M	F	M	F
DIGESTIVE SYSTEM—*continued.*																				
Acute gastritis	1	...	1	1	1	2	...	...	1	1	...	...	...	...	...	...	...	...	1	1
Gastric ulcer	7	4	13	5	19	24	...	1	3	8	10	1	1	1	...	1	1	1	4	18
Carcinoma of stomach	1	...	...	1	...	1	...	...	...	...	...	...	1	...	...	...	1	...	...	...
Vomiting	...	...	1	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Intestines:																				
Diarrhœa	5	4	8	10	7	17	12	1	1	1	1	1	...	...	1	...	1	...	8	7
Constipation	4	6	6	11	5	16	3	2	4	2	3	1	1	...	...	...	...	...	11	5
Colic	3	...	2	3	2	5	...	1	...	3	...	...	1	...	...	...	...	...	3	2
Typhlitis	2	...	2	3	1	4	...	1	1	...	1	...	1	...	...	...	...	...	3	1
Enteritis	...	1	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...
Perforation of vermiform appendix	1	1	...	2	...	2	...	1	...	...	...	...	...	...	2	...	...	...	...	...
Stricture	...	...	1	...	1	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...
Malignant disease	3	1	...	3	1	4	...	...	1	...	2	1	...	...	1	...	2	1	...	...
Colitis	1	...	1	2	...	2	...	1	...	...	...	1	...	...	...	...	...	...	2	...
Volvulus	1	...	...	1	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	..
Liver:																				
Cirrhosis of liver	1	4	2	5	2	7	...	...	...	...	2	4	1	...	...	...	...	...	5	2
Malignant disease	2	...	...	1	1	2	...	...	...	...	1	1	...	...	1	...	...	...	...	1
Jaundice	3	1	2	5	1	6	2	...	...	1	...	1	1	...	1	...	1	...	3	1
Abscess	...	2	...	2	...	2	...	...	...	1	1	...	...	...	...	...	1	...	1	...
Peritoneum:																				
Acute peritonitis	2	1	1	1	3	4	...	...	1	...	1	2	...	...	1	...	...	1	...	2
Chronic "	1	2	...	1	2	3	...	...	1	...	...	...	1	...	1	...	...	...	...	2
Malignant disease	2	...	...	1	1	2	...	...	...	...	...	...	...	...	...	1	1	...	...	...
Ascites	1	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...
LYMPHATIC SYSTEM:																				
Elephantiasis	1	...	...	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
THYROID BODY:																				
Exophthalmic goître	...	2	...	...	2	2	...	...	1	...	...	1	...	...	...	...	...	...	...	2
Myxœdema	1	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Bronchocele	...	1	...	...	1	1	...	...	...	...	...	...	1	...	...	...	...	1	...	...
SUPRARENAL BODY:																				
Addison's disease	...	1	...	1	...	1	...	...	...	1	...	...	...	...	...	...	1	...	...	...

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	Oct. to Dec.	Sex.			Age.							Result.					
				Males.	Females.	Total.	Under 5 yrs	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved.		Relieved.	
															M	F	M	F	M	F
URINARY SYSTEM:																				
Acute nephritis	1	2	3	2	4	6	...	...	...	3	2	...	1	...	...	...	...	...	1	4
Chronic " (large white kidney)	6	5	3	9	5	14	...	1	1	4	3	3	1	...	3	...	1	...	7	4
Chronic nephritis (granular contracted kidney)	8	3	2	12	1	13	...	...	...	2	1	4	3	3	1	1	...	...	10	1
Pyonephrosis	...	1	...	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Movable kidney	1	...	1	...	2	2	...	...	...	1	...	...	1	...	...	...	...	...	...	2
Abscess of "	...	...	1	...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Paroxysmal hæmoglobinuria	1	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...
SKIN:																				
Erythema	...	...	1	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Eczema	...	1	...	1	...	1	...	...	...	...	...	...	...	1	...	...	1	...	...	...
Mycosis fungoides	...	1	...	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...
DISEASES OF WOMEN:																				
Ovarian tumour	1	2	...	...	3	3	...	...	...	1	...	2	...	...	...	1	...	2	...	...
VARIOUS:																				
Nil	6	1	3	5	5	10	4	4	...	...	1	...	...	1	...	...	1	1	4	4
Abscess	1	...	...	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...
Ulcer	...	1	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...
Abdominal tumour	2	4	...	4	...	4	...	...	...	1	1	1	1	...	...	...	3	...	1	...
Hypermetropia	1	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...
Headache	1	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	...
Cancer, cervical glands	1	...	...	1	...	1	...	...	...	...	...	...	1	...	...	...	1	...	...	...
Osteitis deformans	...	1	...	...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Myopia	...	...	1	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Ophthalmia neonatorum	...	...	1	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1

TABLE E.—*List of Deaths in the Medical Wards.*

	Males.		Females.
GENERAL DISEASES:			
Diphtheria	10	...	5
Enteric fever	0	...	2
Pyæmia	0	...	1
Pertussis	0	...	1
Morbilli	1	...	0
Cerebro-spinal fever	1	...	0
Tetanus	0	...	1
Tuberculosis	3	...	3
Influenza	0	...	1
Rickets	0	...	1
DISEASES OF THE NERVOUS SYSTEM:			
Cerebral hæmorrhage	0	...	1
" tumour	1	...	0
" softening	1	...	1
Diphtheritic palsy	0	...	1
Laryngismus	0	...	1
Cerebro-spinal fever	1	...	0
DISEASES OF THE CIRCULATORY SYSTEM:			
Pericarditis	0	...	1
Dilated heart	1	...	0
Mitral disease	1	...	4
Thoracic aneurysm	2	...	0
Pulmonary embolism	0	...	1
DISEASES OF THE RESPIRATORY SYSTEM:			
Acute bronchitis	0	...	1
Lobar pneumonia	3	...	2
Lobular "	4	...	5
Malignant tumour of lung	1	...	0
Phthisis	7	...	3
Emphysema	0	...	1
Dry pleurisy	1	...	0
Bronchiectasis	1	...	0
DISEASES OF THE DIGESTIVE SYSTEM:			
Intestinal obstruction (volvulus)	0	...	1
Duodenal ulcer	1	...	0
Perforation of vermiform appendix	2	...	0
Diarrhœa	3	...	0

DISEASES OF THE DIGESTIVE SYSTEM—*continued.*

	Males.		Females.
Malignant disease of intestine	1	...	0
,, ,, liver	1	...	0
Jaundice	1	...	0
Diabetes	1	...	1
Peritonitis, acute	2	...	0
,, chronic	1	...	1
Malignant disease of peritoneum	0	...	1
Large white kidney	3	...	0
Granular contracted kidney	1	...	2
Abscess of kidney	0	...	1

DISEASES OF THE GENERATIVE SYSTEM:

Ovarian tumour	0	...	1
Total	56	...	45

TABLE F.—*Lobar Pneumonia.*

Sixty-nine cases of lobar pneumonia were treated in the Hospital during the year 1895, which added to the previous four years makes a total of 380 cases.

As will be seen below, by far the larger number of cases occurred during the first 5 months of the year. In April and June the cases were very few in number.

Ages.

	Under 5.	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.
1891 to 1894	49	37	57	75	48	29	12	6
1895	18	10	10	15	11	4	2	0
Total ...	67	47	67	90	59	33	14	6

	Males.	Females.
1891 to 1894	234	77
1895	42	27
Total ...	276	104

Numbers admitted in each Month.

	1891-94.	1895.	Total.		1891-94.	1895.	Total.
January	46	10	56	July	25	0	25
February ...	27	7	34	August	13	0	13
March	40	14	54	September ...	16	0	16
April	36	4	40	October.....	14	5	19
May.....	40	12	52	November ...	16	4	20
June	23	1	24	December.....	15	3	18

For purposes of comparison I give the chief meteorological records month by month during the same period, though, with but such a small number of cases from one Hospital only, the results cannot be well compared. As far as one can see, no one condition has much relation to the prevalency of this disease.

Month.	Weather.	Temperature.	Barom. Pressure.	Rainfall.	Relative Humidity.	Wind.	Sunshine.
JANUARY ..	Cold and changeable	—4·9 usual 34·1 average 29·9—38·2 variation	low 29·687 —·319 of usual	Excessive	88	Changeable	Much
FEBRUARY...	Early month cold, later gradual thaw	—11·2 of usual 29·3 average 23·0—35·6 variation	high 30·093 +·104 of usual	Slight	74 —1·57 of average	E., N.E.	Much
MARCH	Very cold and changeable	+·6 of usual 43·3 average 35·7—50·8 variation	low —·208 29·742	Excess 1·23	88	S.W. or S. or N.W.	Deficient
APRIL	Very variable. Fogs.....	+1·2 of usual 49·1 average 40·9—57·2 variation	high +·031 of usual 29·909	—·38 less 1·46	82	Variable N.E., W., S.W.	Deficient
MAY	Warm early, later cold, winds chiefly North. Fogs	+3·2 excess 56·6 average 46·1—67·1 variation	+·118 excess 30·099	—1·52 less ·34	70	E., N.E., N.	Large excess
JUNE	Early month dry and fair, Later rain	+1·4 excess 61·3 average 50·5—72·1 variation	+·096 excess 30·088	—1·91 less ·20	68	Variable N.E. to S.W.	Above normal
JULY	Very unsettled	—·2 below 68·0 average 54·4—72·5 variation	—·67 below 29·89	+1·65 excess 4·03	74	W., S., S.W., N.W.	Above normal
AUGUST	Very changeable.....	+·2 below 62·9 average 53·8—72·0 variation	—·018 below 29·936	+·63 excess 2·83	78	W., S.W.	Abundant
SEPTEMBER..	Fine and dry	+5·4 excess 63·4 average 51·8—74·9 variation	+·166 30·174	—1·80 below ·95	84	Variable E., W., calm	Excess of normal
OCTOBER	Changeable	—3·1 below 46·6 average 39·2—53·9 variation	—·671 29·852	+·53 excess 3·10	88	W. to N., N.W.	Deficient
NOVEMBER ..	Unsettled, especially early	+3·7 excess 47·4 average 41·7—53·3 variation	—·009 29·889	+·78 excess 3·01	89	W. or S.W. 1st half S.E. or E. 2nd half	Deficient
DECEMBER..							

As to other causes nine patients had been heavy drinkers, in eight there was habitual exposure to weather, and also eight had a distinct history of a chill and wetting. Four cases had previous kidney disease, two were very subject to bronchitis, one had just recovered from measles, and one from acute rheumatism; one patient had had a previous attack of pneumonia. In only one case was a distinct history of direct infection obtainable.

	1891-94.	1895.	Total.
Crisis took place in	222	40	262
Lysis „ „	56	11	67

Crisis occurring on

	1891-94.	1895.	Total.		1891-94.	1895.	Total.
1st day	1	0	1	9th day	25	5	30
2nd „	5	0	5	10th „	15	1	16
3rd „	7	0	7	11th „	10	0	10
4th „	21	7	28	12th „	4	1	5
5th „	23	7	30	13th „	1	0	1
6th „	34	8	42	14th „	2	0	2
7th „	42	7	49	15th „	1	0	1
8th „	30	4	34	16th „	3	0	3

The duration of the fever terminating by lysis was as follows:—

Days.	1891-94.	1895.	Total.	Days.	1891-94.	1895.	Total.
5	0	1	1	15	2	0	2
6	3	0	3	16	1	0	1
7	9	1	10	17	0	0	0
8	10	2	12	18	0	0	0
9	5	1	6	19	0	0	0
10	5	2	7	20	1	0	1
11	6	0	6	21	1	0	1
12	2	1	3	22	1	0	1
13	4	0	4	23	1	0	1
14	4	1	5				

Cases admitted, in each group of three months.

	1891-94.	1895.	Total.		1891-94.	1895.	Total.
Jan. to March ...	113	31	144	July to Sept.	54	0	54
April to June ...	99	17	116	Oct. to Dec.	45	12	57

There were five deaths in the sixty-nine cases, three males and two females, giving a percentage mortality of 7·25 for the year 1895.

One man died on the 9th day of asthenia, aged 36.
„ „ 3rd „ „ „ 38.
„ „ 5th „ of asphyxia, „ 52.
One woman „ 8th „ „ „ 39.
„ „ 18th „ of pericarditis, aged 26.

The signs of consolidation appeared at the right base in twenty-seven cases, and in four at the right upper lobe. On the left side in twenty-seven cases, one being in the upper lobe, on both sides in three cases.

The chief complications were: pleurisy with effusion in three cases, occurring on the 3rd, 9th, and 11th days of the disease respectively. In one case empyema occurred on the 7th day; this was a man, aged 43, with a strong alcoholic history. In one case of a man, aged 38, who died on the 5th day of his illness, dilatation of the bronchial tubes was found post-mortem. One case developed acute tonsillitis on the 9th day after the crisis. Two patients developed pyæmic symptoms: one a man, aged 18, with no history of alcohol, a subcutaneous abscess developed over the olecranon 14 days after the crisis, which occurred on the 11th day of the disease; the pus was evacuated, and it healed readily.

The other patient, an alcoholic man of 34, had a febrile period of 12 days, after which the temperature was normal for 5 days; it again rose to 102·5, going in the morning to 100, with pain and effusion in left shoulder and ankle; the former improved and went down, but the skin to the outer side of the ankle became red and œdematous, and finally burst; the patient being transferred to the Surgical Wards, where he finally recovered with some stiffness of the joint.

One case, a feeble girl of 26, developed pericarditis, from which she died after an illness of about 3 weeks.

Temporary albuminuria was noted in 5 cases.

SURGICAL REGISTRAR'S REPORT FOR THE YEAR 1895.

By PHILIP R. W. DE SANTI.

The total number of cases under treatment in the Surgical Wards during the past year was 923, viz.:—

	Males.	Females.	Total.
Remaining in hospital December 31st, 1894 ...	31	36	67
Admitted during the year 1895	546	310	856
	577	346	923
Of these there were:			
Discharged, cured, or relieved	427	385	812
Died	24	11	35
In hospital, December 31st, 1895	42	34	76
	493	430	923

The mortality during the year was 3·77 per cent. (The mortality from injuries during the year was 3·84 per cent. The mortality from general diseases during the year was 4·13 per cent.)

Owing to the closing of the Hospital for some three months for structural alterations, the number of patients is less than during the year 1894.

TABLE I.—*Abstract, showing* DISEASES *in Classes, according to the authorised nomenclature of the Royal College of Physicians.*

DISEASE.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
GENERAL DISEASES:													
Erysipelas	1	...	1	1	...	...	...	...	...	...	...	1	...
Pyæmia	1	...	1	...	...	1	...	...	...	...	...	...	1
Gangrene (diabetic)	1	1	...	...	...	...	...	...	...	1	...	...	1
" (senile)	1	...	1	...	...	...	...	...	...	...	1	1	...
Scurvy	1	...	1	...	...	...	...	...	...	...	1	1	...
Purpura	1	...	1	...	...	...	...	...	...	...	1	...	1
Neuromimesis	2	2	...	...	...	...	1	1	...	...	...	2	...
Tubercular meningitis	1	1	...	1	...	...	...	...	...	...	...	...	1
Acute pneumonia	2	2	...	...	...	...	...	...	1	1	...	1	1
Hæmophilia	1	...	1	...	1	...	...	...	...	...	...	1	...
Melæna	1	1	...	...	...	...	...	1	...	...	...	1	...
VENEREAL DISEASES:													
Gonorrhœa	4	2	2	...	...	...	4	...	...	...	...	4	...
Phimosis	4	4	...	...	...	1	3	...	...	...	...	4	...
Paraphimosis	1	1	...	...	...	1	...	...	...	...	...	1	...
Syphilis	6	3	3	...	...	1	1	3	1	...	...	6	...
LOCAL DISEASES:													
Tumours:													
Epithelioma of—													
Soft palate	1	1	...	...	...	...	...	...	...	1	...	1	...
Lip	2	2	...	...	...	...	...	...	...	...	2	2	...
Tongue	5	3	2	...	...	...	...	...	2	3	...	4	1
Œsophagus	1	1	...	...	...	...	...	...	...	1	...	1	...
Female urethra	1	...	1	...	...	...	...	...	...	1	...	1	...
Rodent ulcer	4	3	1	...	...	...	...	2	...	1	1	4	...
Carcinoma:													
Breast	9	...	9	...	...	...	...	1	5	2	1	9	...
" recurrent	4	...	4	...	...	...	...	...	3	1	...	4	...
Omentum	1	1	...	...	...	...	...	...	1	...	...	1	...
Rectum	4	4	...	...	...	...	...	...	...	3	1	3	1
Stomach	1	...	1	...	...	...	...	...	1	...	...	1	...
Vagina	1	...	1	...	...	...	...	...	1	...	...	...	1
Sarcoma:													
Femur	2	2	...	...	...	...	1	...	...	1	...	2	...
Superior maxilla	3	...	3	...	...	1	2	...	...	...	...	3	...
Inferior "	1	...	1	...	...	1	...	...	...	...	...	1	...
Ilium	1	...	1	...	...	...	...	...	...	...	1	1	...
Neck	2	2	...	...	...	...	...	...	1	1	...	1	1
Recurrent of cheek	1	...	1	...	...	...	...	...	...	1	...	1	...
" of inguinal glands	1	1	...	...	...	...	1	...	...	...	...	1	..

TABLE I.—*continued.*

DISEASE.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
LOCAL DISEASES—*contd.*—													
Cysts:													
Dermoid	1	...	1	...	...	...	1	...	...	...	...	1	...
Sebaceous	5	2	3	...	1	1	2	1	...	...	...	5	...
Cystic hygroma neck	1	1	...	1	...	...	...	...	...	...	...	...	1
Adventitious	1	...	1	...	...	...	...	1	...	...	...	1	...
Bronchial	2	...	2	...	...	...	2	...	...	...	...	2	...
Ovarian	1	...	1	...	...	1	...	...	...	...	...	1	...
Suppurating ovarian	1	...	1	...	...	...	...	1	...	...	...	1	...
Adeno-fibroma:													
Breast	1	...	1	...	...	1	...	...	...	...	...	1	...
Exostosis	3	2	1	...	...	3	...	...	...	...	...	3	...
Lipoma:													
Groin	2	...	2	...	...	...	...	1	1	...	...	2	...
Nasi	1	1	...	...	...	...	...	...	...	...	1	1	...
Subperitoneal	1	1	...	...	...	...	...	...	...	1	...	1	...
Nævus	2	1	1	2	...	...	...	...	...	...	...	2	...
Papilloma:													
Rectum	1	...	1	...	...	...	1	...	...	...	...	1	...
Tongue	1	1	...	...	...	...	...	...	...	...	1	1	...
Polypus:													
Rectum	1	1	...	1	...	...	...	...	...	...	...	1	...
Antrum	1	...	1	...	...	...	...	1	...	...	...	1	...
Thyroid:													
Bronchocele	2	...	2	...	...	...	...	...	...	2	...	2	...
MALFORMATIONS AND DEFORMITIES:													
Cleft palate	1	...	1	1	...	...	...	...	...	...	...	1	...
Hare lip	8	7	1	8	...	...	...	...	...	...	...	7	1
Genu valgum	4	2	2	2	2	...	...	...	...	...	...	4	...
Hammer toe	3	...	3	...	...	...	2	...	...	1	...	3	...
Hallux valgus	1	1	...	...	...	...	1	...	...	...	...	1	...
Dupuytren's contraction	1	1	...	...	...	...	...	1	...	...	...	1	...
Phimosis	17	17	...	5	7	5	...	...	...	...	...	17	...
Torticollis	2	2	...	...	...	1	...	1	...	...	...	2	...
Pes planus	1	1	...	...	...	1	...	...	...	...	...	1	...
Spine:													
Lateral curvature	3	...	3	1	...	1	...	1	...	...	...	3	...
Pott's disease	4	3	1	...	2	1	...	1	...	...	...	4	...
Neuralgia	1	1	...	...	1	...	...	...	...	...	...	1	...
Talipes:													
Varus	3	...	3	...	1	1	...	1	...	...	...	3	...
Valgus	4	...	4	...	...	2	2	...	...	...	...	4	...
Planus	3	2	1	...	...	1	1	1	...	...	...	3	...
Equino varus	2	1	1	1	1	...	...	...	...	...	...	3	...
Equinus	1	1	...	...	...	1	...	...	...	...	...	1	...

TABLE I.—*continued.*

DISEASE.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
DISEASES OF THE NERVOUS SYSTEM:													
Epilepsy	1	1	...	...	...	...	...	...	1	...	...	1	...
Spastic paraplegia	1	1	...	...	...	...	...	1	...	...	...	1	...
Sciatica	2	2	...	...	...	...	2	...	...	...	...	2	...
Cephalalgia	1	...	1	...	...	...	...	1	...	...	...	1	...
Herpes	1	...	1	...	...	...	...	1	...	...	...	1	...
DISEASES OF THE EYE:													
Conjunctivitis	1	1	...	...	...	1	...	...	...	...	...	1	...
Kerato-iritis	1	1	...	...	...	...	...	1	...	...	...	1	...
Ophthalmia	1	1	...	1	...	...	...	...	...	...	...	1	...
Cataract	6	3	3	...	...	...	...	...	...	1	5	6	...
Traumatic cataract	2	2	...	...	...	1	1	...	...	...	...	2	...
Optic neuritis	1	...	1	...	...	1	...	...	...	...	...	1	...
Glaucoma	2	...	2	...	...	...	...	...	...	2	...	2	...
Panophthalmitis	2	1	1	...	...	...	1	1	...	...	...	2	...
Internal strabismus	1	1	...	...	...	...	1	...	...	...	...	1	...
External "	1	1	...	...	...	1	...	...	...	...	...	1	...
Iritis	2	2	...	...	...	1	1	...	...	...	...	2	...
DISEASES OF THE EAR:													
Otorrhœa and otitis	11	6	5	1	2	3	2	...	1	2	...	8	3
DISEASES OF THE NOSE:													
Deviated septum	1	...	1	...	...	...	...	1	...	...	...	1	...
Empyema of antrum	1	...	1	...	...	...	...	1	...	...	...	1	...
Septal abscess	1	1	...	...	...	...	...	...	1	...	...	1	...
Enlarged inferior turbinate	3	...	3	...	...	2	1	...	...	...	...	3	...
DISEASES OF THE THORAX:													
Empyema	7	7	...	1	...	1	...	4	1	...	...	7	...
DISEASES OF THE VASCULAR SYSTEM:													
Phlebitis and thrombosis	3	2	1	...	...	...	1	1	1	...	...	3	...
Varicose veins, leg	18	11	7	...	...	3	8	5	2	...	...	18	...
DISEASES OF THE LYMPHATIC SYSTEM:													
Glands, inflamed and suppurating	14	9	5	1	1	7	1	...	3	1	...	14	...
Tubercular	10	4	6	...	1	7	1	1	...	...	...	10	...
Lymphangitis	2	1	1	...	1	...	1	...	...	...	...	2	...
Lymphadenitis	1	1	...	...	...	1	...	...	...	...	...	1	...
Lymphoma	2	...	2	...	...	...	1	...	...	1	...	2	...
Lymphadenoma	1	...	1	...	...	1	...	...	...	...	...	1	...

TABLE I.—*continued.*

DISEASE.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
DISEASES OF THE DIGESTIVE SYSTEM :													
Tongue :													
Septic ulcer	1	1	...	...	...	...	...	1	...	...	...	1	...
Tonsils :													
Hypertrophy	3	1	2	...	1	2	...	...	...	...	...	3	...
Hæmorrhage following tonsillotomy	1	...	1	...	...	...	1	...	...	...	...	1	...
Parotid duct fistula	1	1	...	...	...	...	...	...	...	1	...	1	...
Wharton's duct fistula	1	...	1	...	...	...	1	...	...	...	...	1	...
Pharynx :													
Adenoids	13	4	9	2	2	6	3	...	...	...	...	13	...
Œsophagus :													
Malignant disease	1	1	...	...	...	...	...	...	...	...	1	...	1
Dysphagia, functional	1	1	...	...	...	...	...	...	...	...	1	1	...
Intestines :													
Hernia :													
Reducible inguinal	28	23	5	5	3	5	5	6	3	1	...	27	1
Irreducible inguinal	4	4	...	...	...	...	1	1	1	1	...	4	...
Reducible femoral	3	...	3	...	...	...	2	...	...	...	1	3	...
Irreducible femoral	2	1	1	...	...	...	1	...	1	...	...	2	...
Inflamed femoral hernia	1	1	...	1	...	...	...	...	...	...	...	1	...
Ventral hernia	1	...	1	...	...	1	...	...	...	...	...	1	...
Umbilical hernia	2	1	1	...	...	...	...	...	1	...	1	2	...
Strangulated :													
Inguinal	6	6	...	1	...	...	1	...	1	2	1	4	2
Femoral	3	1	2	...	...	...	...	1	...	1	1	1	2
Hydrocele of hernial sac	1	1	...	...	1	...	...	...	...	...	...	1	...
Intestinal obstruction :													
Acute	1	1	...	...	...	...	1	...	...	...	...	...	1
Typhlitis	1	1	...	...	...	1	...	...	...	...	...	1	...
Carcinoma of stomach	1	...	1	...	...	...	...	...	...	1	...	1	...
Prolapse of gut after inguinal colotomy	1	...	1	...	...	...	...	...	1	...	...	1	...
Rectum and anus :													
Anal fissure	1	...	1	...	...	...	1	...	...	...	...	1	...
„ prolapse	1	...	1	...	...	...	...	...	1	...	...	1	...
Hæmorrhoids	18	15	3	...	...	...	1	6	8	3	...	18	...
Polypus	1	...	1	...	...	...	...	1	...	...	...	1	...

TABLE I.—*continued.*

DISEASE.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
DISEASES OF THE DIGESTIVE SYSTEM—*continued*—													
Rectum and anus—contd.—													
Fistula in ano	20	14	6	...	...	...	6	7	5	2	...	20	...
Stricture of rectum	3	1	2	...	...	...	...	1	2	...	...	3	...
Coccydynia	1	...	1	...	...	...	1	...	...	...	...	1	...
DISEASES OF GENITO-URINARY ORGANS:													
Bladder:													
Calculus	2	2	...	1	...	...	...	...	...	1	...	2	...
Kidney:													
Calculus	1	1	...	...	...	1	...	...	...	...	...	1	...
Hydronephrosis	2	...	2	...	...	...	...	2	...	...	...	2	...
Pyonephrosis	2	1	1	...	...	1	...	1	...	...	...	1	1
Tubercle	1	1	...	...	...	1	...	...	...	...	...	1	...
Penis and prepuce:													
Paraphimosis	1	1	...	...	...	...	...	...	1	...	...	1	...
Enlarged prostate	4	4	...	...	...	...	...	...	...	...	4	4	...
Spermatic cord:													
Varicocele	2	2	...	...	...	1	...	1	...	...	...	2	...
Testes:													
Orchitis	1	1	...	...	...	...	1	...	...	...	...	1	...
Epididymitis	1	1	...	...	...	1	...	...	...	...	...	1	...
Tubercle	4	4	...	...	...	...	3	1	...	...	...	4	...
Sarcoma	3	3	...	...	...	...	...	1	...	1	1	3	...
Syphilis	1	1	...	...	...	...	...	1	...	...	...	1	...
Tunica vaginalis:													
Hydrocele	8	8	...	1	...	3	...	...	1	2	1	8	...
Urethra:													
Stricture	20	20	...	...	...	...	1	7	4	3	5	15	5
Ruptured perinæum	2	...	2	...	...	...	...	2	...	...	...	2	...
Breast:													
Abscess	8	...	8	...	...	1	4	3	...	...	...	8	...
DISEASES OF ORGANS OF LOCOMOTION:													
Caries:													
Metacarpus	3	3	...	2	1	...	...	...	...	...	...	3	...
Metatarsus	1	1	...	...	...	...	1	...	...	...	...	1	...

TABLE I.—*continued.*

DISEASE.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
DISEASES OF ORGANS OF LOCOMOTION—*contd.*—													
Caries—continued :—													
Humerus	1	1	...	1	...	...	...	...	...	...	...	1	...
Lower jaw	1	1	...	...	...	...	1	...	...	...	...	1	...
Tarsus	1	1	...	...	1	...	...	...	...	...	...	1	...
Necrosis:													
Inferior maxilla	1	1	...	...	...	...	1	...	...	...	...	...	1
Humerus	1	1	...	...	...	...	...	...	1	...	...	1	...
Clavicle	1	1	...	...	...	1	...	...	...	...	...	1	...
Tibia	1	1	...	...	...	1	...	...	...	...	...	1	...
Femur (quiet)	2	2	...	...	...	2	...	...	...	...	...	2	...
Tubercular dactylitis	1	1	...	1	...	...	...	...	...	...	...	1	...
Chronic periostitis:													
Femur	2	2	...	...	...	1	...	1	...	...	...	2	...
Tibia	1	...	1	...	...	...	1	...	...	...	...	1	...
Metatarsal bone	1	...	1	...	...	...	...	1	...	...	...	1	...
Humerus	1	...	1	...	...	1	...	...	...	...	...	1	...
Frontal bone	1	...	1	...	...	1	...	...	...	...	...	1	...
Rickets	1	...	1	1	...	...	...	...	...	...	...	1	...
Spontaneous fracture of femur (malignant disease)	1	...	1	...	...	...	...	...	...	1	...	1	...
DISEASES OF JOINTS:													
Ankylosis, fibrous	4	2	2	...	1	...	1	...	1	...	1	4	...
Closure of lower jaw	1	...	1	...	...	...	...	1	...	...	...	1	...
Chronic strumous or tubercular disease:													
Ankle	7	3	4	...	...	6	...	1	...	...	...	7	...
Elbow	8	7	1	2	2	1	3	...	...	...	...	8	...
Wrist	1	1	...	...	...	...	...	...	...	1	...	1	...
Hip	17	9	8	4	6	4	1	...	2	...	...	17	...
Knee	7	2	5	...	3	...	3	1	...	...	...	7	...
Big toe	1	1	...	1	...	...	...	...	...	...	...	1	...
Tubercular epiphysitis of wrist	1	...	1	...	...	1	...	...	...	...	...	1	...
Loose bodies in knee	1	1	...	...	...	...	...	...	1	...	...	1	...
Contracted knee	2	2	...	...	2	...	...	...	...	...	...	2	...
Chronic osteo-arthritis	4	3	1	...	...	...	...	...	...	1	3	4	...
Synovitis, acute or subacute:													
Knee	4	2	2	1	...	...	...	1	1	1	...	4	...
Ankle	12	9	3	...	...	1	5	3	2	...	1	12	...
Elbow	1	1	...	...	...	...	...	1	...	...	...	1	...
Chronic, of knee	1	...	1	...	...	...	...	...	1	...	...	1	...

TABLE I.—*continued.*

DISEASE.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+ 60	R.	D.
DISEASES OF JOINTS—*continued*—													
Suppurative arthritis:													
Hip	1	1	...	1	...	...	...	...	...	...	...	1	...
Inter-phalangeal joint	1	...	1	...	...	...	1	...	...	...	...	1	...
DISEASES OF THE BURSÆ, FASCIÆ, AND TENDONS:													
Bursæ:													
Simple enlargement:													
Bursa patellæ	5	1	4	...	...	2	1	2	...	...	...	5	...
Olecranon	1	1	...	...	...	...	...	...	1	...	...	1	...
Popliteal space	1	1	...	...	...	...	1	...	...	...	...	1	...
Inflamed and suppurating	6	2	4	...	1	2	...	1	2	...	...	6	...
Simple ganglion	1	1	...	...	...	...	...	...	1	...	...	1	...
DISEASES OF THE CELLULAR TISSUE.—ABSCESS, INFLAMMATION AND SUPPURATION:													
Acute abscess:													
Scalp	2	...	2	...	...	1	1	...	...	...	...	2	...
Dental	7	5	2	1	...	2	4	...	...	...	...	7	...
Face	2	2	...	1	...	...	...	1	...	...	...	2	...
Neck	4	1	3	2	1	1	...	...	...	...	...	4	...
Axillary	3	2	1	...	...	1	1	...	...	1	...	3	...
Supracondyloid	1	1	...	1	...	...	...	...	...	...	...	1	...
Perineal	2	2	...	...	...	1	...	...	...	1	...	2	...
Extra-articular knee	1	...	1	...	...	...	1	...	...	...	...	1	...
Chronic abscess:													
Ischio-rectal	6	4	2	...	...	...	2	2	1	...	1	6	...
Inguinal	10	6	4	2	1	3	2	2	...	...	...	10	...
Neck	18	6	11	5	1	5	4	1	2	...	...	18	...
Axilla	1	...	1	...	...	1	...	...	...	...	...	1	...
Arm	3	1	2	2	1	...	...	...	...	...	...	3	...
Forearm	1	1	...	...	...	1	...	...	...	...	...	1	...
Scrotal and perineal	2	2	...	...	1	...	...	...	...	...	1	2	...
Perianal	1	1	...	...	1	...	...	...	...	...	...	1	...
Gluteal	1	1	...	1	...	...	...	...	...	...	...	1	...
Thigh	6	3	3	1	1	2	1	1	...	...	...	6	...
Popliteal space	1	...	1	...	1	...	...	...	...	...	...	1	...
Foot	2	1	1	...	...	...	...	2	...	...	...	2	...
Abdominal wall	1	...	1	...	...	...	1	...	...	...	...	1	...
Chest wall	2	2	...	1	...	...	1	...	...	...	...	2	...
Lumbar	3	2	1	...	2	...	1	...	...	...	...	3	...
Iliac	1	...	1	...	...	...	...	1	...	...	...	1	...
Psoas	5	4	1	...	...	1	2	...	1	...	1	3	2
Head	1	...	1	1	...	...	...	...	...	...	...	1	...

TABLE I.—*continued.*

DISEASE.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
DISEASES OF THE CELLULAR TISSUE—*continued*—													
Whitlow	8	4	4	...	...	1	2	2	3	...	...	8	...
Cellulitis:													
Scalp	1	1	...	...	...	...	...	...	...	1	...	1	...
Elbow	2	1	...	...	...	...	1	...	...	1	...	2	...
Forearm	1	1	...	...	...	...	...	1	...	...	...	1	...
Hand	14	11	3	...	1	...	5	3	3	...	2	14	...
Ischio-rectal	1	1	...	...	...	...	...	1	...	...	...	1	...
Buttock	1	1	...	...	...	...	...	1	...	...	...	1	...
Leg	1	1	...	...	...	...	1	...	...	...	...	1	...
Ankle	1	1	...	...	...	...	1	...	...	...	...	1	...
Foot	1	1	...	...	...	1	...	...	...	...	...	1	...
Carbuncle	3	3	...	...	...	...	1	...	2	...	...	3	...
Furunculus	2	1	1	...	...	...	1	...	1	...	...	2	...
Sinus:													
Dorsal region	1	1	...	...	...	...	...	1	...	...	...	1	...
Groin	1	1	...	...	...	...	...	...	1	...	...	1	...
Hip	1	1	...	...	...	1	...	...	...	...	...	1	...
Thigh	1	1	...	...	...	...	1	...	...	...	...	1	...
Abdominal wall	1	...	1	...	...	...	1	...	...	...	...	1	...
Old nephrectomy	1	...	1	...	...	...	1	...	...	...	...	1	...
DISEASES OF CUTANEOUS SYSTEM:													
Ulcers:													
Simple	5	4	1	...	...	...	...	2	2	1	...	5	...
Stump	1	1	...	...	...	...	...	...	1	...	...	1	...
Varicose	2	1	1	...	...	...	2	...	...	...	...	2	...
Tubercular	2	1	1	...	...	1	...	...	1	...	...	2	...
Syphilitic	5	3	2	...	...	...	...	2	2	...	1	5	...
Perforating	1	...	1	...	...	...	...	...	...	...	1	1	...
Nails, ingrowing	3	2	1	...	...	1	2	...	...	...	...	3	...
Lupus	4	1	3	...	2	1	1	...	...	...	...	4	...
Scars	2	2	...	1	...	1	...	...	...	...	...	2	...
Bunions	1	1	...	...	...	...	...	1	...	...	...	1	...
Eczema	1	...	1	...	...	...	...	1	...	...	...	1	...
Psoriasis	6	2	4	...	...	2	2	2	...	...	...	6	...
Erythema multiforme	1	1	...	...	1	...	...	...	...	...	...	1	...
Potus	1	1	...	...	...	...	...	1	...	...	...	1	...
Chilblain	1	1	...	...	1	...	...	...	...	...	...	1	...
Attempted suicide, drowning	1	1	...	...	...	...	1	...	...	...	...	1	...
Immersion	1	1	...	...	1	...	...	...	...	...	...	1	...
Senile struma	1	...	1	...	...	...	...	...	...	...	1	1	...
Nil	2	1	1	...	...	...	...	...	...	2	...	2	...

TABLE II.—*Abstract, showing* INJURIES *in Classes, according to the authorised nomenclature of the Royal College of Physicians.*

GENERAL INJURIES.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
GENERAL INJURIES:													
Burns	11	6	5	3	1	2	1	1	...	1	2	8	3
Scalds	3	2	1	1	...	...	1	1	...	...	...	3	...
General contusions	3	3	...	...	1	...	...	...	...	2	...	3	...
LOCAL INJURIES:													
Scalp wounds	6	4	2	1	...	...	2	1	1	1	...	6	...
Fractures:													
Skull, compound (base)	2	2	...	...	...	...	...	1	...	...	1	1	1
Concussion of brain	8	8	...	1	2	2	1	1	1	...	...	8	...
Laceration of brain	2	1	1	...	...	...	1	...	...	...	1	2	...
Contusions of head and face	3	2	1	...	...	...	...	1	...	2	...	3	...
Fracture of nasal bones	2	2	...	...	...	1	...	...	1	...	...	2	...
Fracture of inferior maxilla	2	2	...	...	...	1	...	1	...	...	...	2	...
Subluxation " "	1	...	1	...	...	...	...	1	...	...	...	1	...
Lacerated wounds:													
General	1	1	...	...	...	...	...	...	1	...	...	1	...
Face	2	2	...	...	...	...	...	...	2	...	...	2	...
Eyelid	1	...	1	...	1	...	...	...	...	...	...	1	...
Eyeball	1	1	...	...	...	...	...	1	...	...	...	1	...
Injuries of neck:													
Cut throat	2	1	1	...	...	...	...	1	...	1	...	2	...
Injuries of thorax:													
Fracture of ribs	9	6	1	1	1	...	1	1	2	...	1	7	...
Injuries of back:													
Contusions	1	...	1	...	...	...	1	...	...	...	...	1	...
Injuries of abdomen:													
Contusion and perforation of gut	1	1	...	...	...	...	...	...	...	1	...	1	...
INJURIES OF UPPER EXTREMITIES:													
Lacerated wounds	2	1	1	...	...	1	...	...	1	...	...	2	...
Crushed fingers	8	7	1	1	...	3	1	1	2	...	...	8	...
Simple fractures:													
Clavicle	3	3	...	...	...	1	1	...	1	...	...	3	...
Humerus	5	5	...	...	2	2	...	...	1	...	...	5	...
Olecranon	1	1	...	...	...	...	...	1	...	...	...	1	...
Radius and ulna	1	1	...	...	...	...	1	...	...	...	...	1	...
Ununited fracture:													
Humerus	1	1	...	...	...	...	...	...	1	...	...	1	...

TABLE II.—*continued.*

GENERAL INJURIES.	Total.	Sex.		Age.								Result.	
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.
INJURIES OF UPPER EXTREMITIES—*continued*—													
Dislocations:													
Subcoracoid humerus (with fracture surgical neck)	1	1	...	...	...	...	...	1	...	...	...	1	...
Subcoracoid humerus	2	2	...	...	...	..	...	...	...	2	...	2	...
Radius and ulna	1	1	...	...	...	1	...	...	...	...	...	1	...
Radius	2	1	1	...	1	1	...	...	...	...	...	2	...
Acromial end clavicle	1	...	1	...	...	...	...	1	...	...	...	1	...
INJURIES OF LOWER EXTREMITIES:													
Contusions:													
Ankle	1	1	...	...	...	...	...	...	...	1	...	1	...
Hip	1	1	...	...	...	1	...	...	...	...	...	1	...
Leg	2	2	...	...	...	...	...	2	...	...	...	2	...
Wounds:													
Incised	2	1	1	...	...	...	...	1	1	...	...	2	...
Punctured	1	1	...	...	...	...	1	...	...	...	...	1	...
Poisoned	1	1	...	...	...	...	...	...	...	1	...	1	...
Fractures, simple:													
Femur	7	5	2	2	1	4	...	...	...	...	...	7	...
Patella	3	2	1	...	...	...	...	...	...	2	1	3	...
Old fracture patella	1	1	...	...	...	...	1	...	...	...	...	1	...
Tibia and fibula	11	9	2	...	...	2	...	...	6	2	1	11	...
Tibia	5	5	...	...	1	1	...	2	1	...	...	5	...
Fibula	4	3	1	...	1	...	...	1	1	1	...	4	...
Intracapsular of femur	1	1	...	...	...	...	...	...	...	...	1	...	1
Extracapsular "	1	1	...	...	...	...	...	...	1	...	...	1	...
Ununited fracture of patella	1	1	...	...	...	...	1	...	...	...	...	1	...
Compound fracture of tibia and fibula	1	...	1	...	...	1	...	...	...	...	...	1	...

TABLE III.—*Surgical operations classified according to the authorised nomenclature.*

OPERATIONS.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
REMOVAL OF TUMOURS:														
Amputation of breast for cancer	6	...	6	...	...	...	...	1	4	1	...	6	...	
Removal of recurrent growth:														
From mammary region	3	...	3	...	...	...	...	...	3	...	...	3	...	
" cheek	1	...	1	...	...	...	...	...	...	1	...	1	...	
Removal of cancer (epithelioma):														
Lip	2	2	...	...	...	...	...	...	...	...	2	2	...	
Tongue	4	2	2	...	...	...	...	...	...	3	1	3	1	Entire tongue, Whitehead, 3. Kocher, 1; died exhaustion.
Vagina	1	...	1	...	...	...	...	...	...	1	...	...	1	Secondary to cancer of uterus. (*Vide* abstract.)
Removal of rodent ulcer	3	2	1	...	...	...	...	2	...	1	...	3	...	
Sarcoma: upper jaw	2	...	2	...	...	...	2	...	...	...	...	2	...	1 recurred, and partial excision of opposite sup. maxilla was done.
" lower jaw	1	...	1	...	...	1	...	...	...	...	...	1	...	For endosteal growth; removal of one half.
" testis	3	3	...	...	...	...	...	1	...	1	1	3	...	Castration.
" neck	2	2	...	...	...	...	...	...	1	1	...	1	1	1 cystic sarcoma; recurrence; death.
" recurrent inguinal glands	1	1	...	...	...	...	1	...	...	...	...	1	...	Recurrent to amputation of femur for periosteal growth. (Death since from recurrence in abdomen.)
" Subcutaneous	1	...	1	...	...	...	...	...	...	...	1	1	...	Over crest of ilium, but non-adherent.
Removal of lipoma	2	...	2	...	...	...	...	1	1	...	...	2	...	
" cancellous exostosis	3	2	1	...	...	3	...	...	...	...	...	3	...	
" adeno-fibroma	1	...	1	...	...	1	...	...	...	...	...	1	...	
" cystic hygroma neck	1	1	...	1	...	...	...	...	...	...	...	...	1	Died within 2 hours of operation. No P.M. obtainable.

Removal of dermoid cyst	1	...	1	...	...	...	1	...	...	...	...	1	...	Neck.
" branchial cyst	2	...	2	...	...	...	2	...	...	...	...	2	...	
" sebaceous cyst	5	2	3	...	1	1	2	1	...	...	...	5	...	
For pharyngeal adenoids	13	5	8	2	1	9	1	...	...	...	...	13	...	
Removal of papilloma	2	1	1	...	...	...	1	...	...	...	1	2	...	From rectum 1, from tongue 1.
" nævoid tumour	1	1	...	1	...	...	...	...	...	...	...	1	...	
" polypus rectum	2	1	1	1	...	...	...	1	...	...	...	2	...	1 mucous, 1 fibrous.
" lymphoma of axilla	1	...	1	...	...	...	...	...	...	1	...	1	...	Has recurred since discharge from hospital.
Opening of abscess in face	5	5	...	1	...	1	2	...	1	...	...	5	...	
" " neck	21	8	13	8	2	4	4	...	...	...	...	21	...	
" " breast	7	...	7	...	...	1	3	3	...	...	...	7	...	
" " axilla	4	2	2	...	...	2	1	...	...	1	...	4	...	
" " arm	2	1	1	1	1	...	...	...	...	...	...	2	...	
" " forearm	1	1	...	...	...	1	...	...	...	...	...	1	...	
" " palmar	1	...	1	...	...	...	...	1	...	...	...	1	...	
" " chest wall	1	1	...	...	...	...	1	...	...	...	...	1	...	
" " abdominal wall	1	...	1	...	...	...	...	1	...	...	...	1	...	
" " scalp	2	...	2	...	...	1	1	...	...	...	...	2	...	
" " dorsal	1	1	...	1	...	...	...	...	...	...	...	1	...	
" " lumbar region	4	3	1	...	2	1	1	...	...	...	...	4	...	
" " iliac	1	...	1	...	...	...	...	1	...	...	...	1	...	
" " ischio-rectal	4	3	1	...	...	...	...	3	...	...	1	4	...	
" " inguinal	13	8	5	2	2	3	2	3	...	...	...	13	...	
" " perineal	4	4	...	1	1	1	...	...	1	...	...	4	...	
" " psoas	5	4	1	...	...	1	2	...	1	...	1	3	2	1 tympanitic, died ; 1 from hectic (spinal and sacro-iliac caries).
" " thigh	6	3	3	1	2	2	1	...	...	...	...	6	...	
" " popliteal	1	...	1	...	1	...	...	...	...	...	...	1	...	
" " foot	2	1	1	...	...	...	...	2	...	...	...	2	...	
" " extra-articular knee	1	...	1	...	...	...	1	...	...	...	...	1	...	Of puerperal origin.

TABLE III.—*continued.*

OPERATIONS.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
OPERATIONS ON NERVES:														
Division of spinal accessory	1	1	...	...	...	1	...	...	...	...	...	1	...	For torticollis.
OPERATIONS ON THE EYE:														
Cataract	8	5	3	...	...	1	1	...	...	1	5	8	...	Needling 5. Extraction 3.
Strabismus	2	2	...	...	...	2	...	...	...	...	...	2	...	
Glaucoma	1	...	1	...	...	...	...	...	1	...	...	1	...	Iridectomy.
Excision of eyeball	2	1	1	...	...	...	1	...	1	...	...	2	...	For traumatic panophthalmitis 2.
Iridectomy	2	2	...	...	...	1	1	...	...	...	...	2	...	
OPERATIONS ON THE EAR:														
Mastoid suppuration	2	...	2	...	...	2	...	...	...	...	...	2	...	Gouging mastoid 2.
Scraping external meatus	2	1	1	1	1	...	...	...	...	...	...	2	...	
Otitis media suppurativa, with cerebral complications	3	3	...	...	...	...	1	...	1	1	...	...	3	*Vide* Abstracts.
OPERATIONS ON THE NOSE:														
Lipoma nasi	1	1	...	...	...	...	...	...	...	...	1	1	...	Plastic operation.
Septal abscess	1	1	...	...	...	...	...	...	1	...	...	1	...	
Deviated septum	1	...	1	...	...	...	...	1	...	...	...	1	...	Rectification with forceps.
Turbinotomy	3	...	3	...	...	1	2	...	...	...	...	3	...	
OPERATIONS ON VEINS:														
Excision of varices	17	10	7	...	...	4	7	4	2	...	...	17	...	Ligature and excision 16. Pins 1.
" of varicocele	1	1	...	...	...	1	...	...	...	...	...	1	...	

OPERATIONS ON RESPIRATORY ORGANS:														
Empyema	6	6	...	1	...	...	...	4	1	...	...	6	...	
FOR STRANGULATED HERNIA:														
Inguinal	6	6	...	1	...	...	1	...	1	2	1	4	2	1 reduction *en masse*. 1 non-reduction by taxis. *Vide* abstracts.
Femoral	3	1	2	...	...	...	...	1	...	1	1	1	2	*Vide* abstracts.
FOR RADICAL CURE:														
Inguinal	25	21	4	4	4	5	4	5	1	2	...	24	1	1 died from shock, castration being performed as well. 1 for hydrocele of sac. 23 excision of sac and suturing of rings.
Femoral hernia	3	1	2	...	...	...	2	...	1	...	...	3	...	
Ventral hernia	1	...	1	...	...	1	...	...	...	...	...	1	...	Following operation for psoas abscess.
FOR FISTULA:														
In ano	19	13	6	...	...	...	6	6	5	2	...	19	...	
Anal fissure	1	...	1	...	...	...	1	...	...	...	...	1	...	
Hæmorrhoids	18	15	3	...	...	...	1	5	7	5	...	18	...	Ligature 12. Whitehead 1. Clamp and cautery 5.
Excision of rectum	1	1	...	...	...	...	...	...	...	1	...	1	...	For carcinoma.
LAPAROTOMY:														
Exploratory	3	2	1	...	...	...	1	...	...	2	...	2	1	1 for injury and subsequent perforation and peritonitis (recovered). 1 for malignant disease of stomach (unrelieved). 1 for acute intestinal obstruction due to carcinoma of descending colon; artificial anus made (died).
Ovariotomy	1	...	1	...	...	...	...	1	...	...	...	1	...	
Suppurating ovarian cyst	1	...	1	...	...	...	1	...	...	...	...	1	...	
Excision of tubercular glands	7	...	7	...	...	3	3	1	...	...	...	7	...	
Scraping glands	12	8	4	3	...	7	1	...	1	...	...	12	...	

TABLE III.—*continued.*

OPERATIONS.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
OPERATIONS ON URINARY ORGANS:														
Nephrotomy	3	1	2	...	...	1	...	2	...	...	...	2	1	For tubercle, 2 (one died). For hydronephrosis, 1.
Nephrectomy	1	...	1	...	...	...	...	1	...	...	...	1	...	For hydronephrosis.
Lithotrity	1	1	...	...	...	...	...	...	...	1	...	1	...	Unrelieved.
Stricture of urethra	9	9	...	..	...	...	1	2	1	4	1	4	5	1 extravasation urine; died of septic poisoning. 3 Cock's operation (2 died), one of suppression of urine. 1 external urethrotomy. 1 internal urethrotomy. 2 rapid dilatation (2 died of pyelonephritis). 1 gradual dilatation.
Circumcision	23	23	...	5	8	6	4	...	...	...	...	23	...	
Radical cure of hydrocele	6	6	...	1	...	3	...	...	...	2	...	6	...	
Castration	4	4	...	...	...	...	3	1	...	...	...	4	...	For tubercle, 2. Sarcoma, 1. Gumma, 1.
Paraphimosis	1	1	...	...	...	...	...	...	1	...	...	1	...	
For ruptured perineum	2	...	2	...	...	...	...	2	...	...	...	2	...	
ON ORGANS OF LOCOMOTION:														
On Bones:														
Periostitis and osteitis, femur	1	1	...	...	...	1	...	...	...	...	...	1	...	
Osteotomy	3	1	2	2	1	...	...	...	...	...	...	3	...	
Necrosis of lower jaw	1	1	...	...	...	...	1	...	...	...	...	...	1	For acute necrosis of bone.
" clavicle	1	1	...	...	...	1	...	...	...	...	...	1	...	
" humerus	1	1	...	...	...	...	...	...	1	...	...	1	...	
" phalanx	1	1	...	...	...	...	...	...	1	...	...	1	...	
" femur	1	1	...	...	...	1	...	...	...	...	...	1	...	
" tibia	1	1	...	...	...	1	...	...	...	...	...	1	...	

Caries of wrist joint	1	1	...	...	...	...	...	...	...	1	...	1	...	Amputation of forearm.
" metacarpus	3	3	...	2	1	...	...	...	...	...	...	3	...	
" tarsus	1	1	...	...	1	...	...	...	...	...	...	1	...	
" metatarsus	2	2	...	1	1	...	...	...	...	...	...	2	...	
Wiring patella	1	1	...	...	...	...	1	...	...	...	...	1	...	For old ununited fracture (good union).
For dislocation radius	1	1	...	...	1	...	...	...	...	...	...	1	...	Excision of head of radius.
OPERATIONS ON JOINTS:														
Fibrous ankylosis of knee	2	1	1	...	1	...	1	...	...	...	...	2	...	Forcible breaking down of adhesions.
" " ankle	1	1	...	...	1	...	...	...	...	...	...	1	...	" " "
" " shoulder	1	1	...	...	...	...	...	...	1	...	...	1	...	" " "
" " wrist	1	...	1	...	...	...	...	...	...	...	1	1	...	" " "
For tubercular epiphysitis of wrist	1	...	1	...	...	1	...	...	...	...	...	1	...	Scraped.
Excision of metacarpal bone	1	1	...	1	...	...	...	...	...	...	...	1	...	
" metatarso-phalangeal joint of big toe	1	1	...	...	...	...	1	...	...	...	...	1	...	
" ankle	1	1	...	...	...	1	...	...	...	...	...	1	...	
" elbow	2	2	...	1	...	...	1	...	...	...	...	2	...	For tubercle.
Arthrectomy of knee	1	1	...	...	1	...	...	...	...	...	...	1	...	
" ankle	1	...	1	...	...	1	...	...	...	...	...	1	...	
" elbow	2	2	...	...	...	...	2	...	...	...	...	2	...	
Scraping tubercular sinus of elbow	1	...	1	...	...	1	...	...	...	...	...	1	...	
Exploration of knee joint	1	1	...	...	...	...	...	...	1	...	...	1	...	For removal of loose bodies.
" hip joint	4	2	2	2	...	1	...	...	1	...	...	3	1	1 pyæmic, died of septic pneumonia. 1 for morbus coxæ. 1 for acute arthritis; joint full of pus; recovery with good movement. 1 for coxalgia; negative.

TABLE III.—*continued.*

OPERATIONS.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
ON MUSCLES, TENDONS, AND BURSÆ:														
Tenotomy	8	2	6	2	1	5	1	1	...	...	...	8	...	
Bursitis excision	6	3	3	...	...	2	2	1	1	...	...	6	...	
„ incision	4	2	2	...	...	2	...	...	1	1	...	4	...	
Ganglion of wrist	1	1	...	...	...	...	...	...	1	...	...	1	...	Dissected out.
Dupuytren's contraction	1	1	...	...	...	...	...	1	...	...	...	1	...	
Hammer-toe	1	...	1	...	...	1	...	...	...	...	...	1	...	Tenotomy of lateral ligaments.
ON CONNECTIVE TISSUE:														
Scraping sinuses	6	3	3	...	1	2	1	1	1	...	...	6	...	
Suturing lacerated wounds	1	1	...	...	...	...	...	1	...	...	...	1	...	
Scraping ulcers	4	3	1	...	...	1	...	...	3	...	...	4	...	
Whitlow	2	1	1	...	...	...	1	...	1	...	...	2	...	
For cellulitis	15	14	1	...	...	1	4	5	2	2	1	15	...	
ON LIMBS AS A WHOLE:														
Amputation of arm	2	2	...	1	1	...	...	...	...	...	...	2	...	1 for tubercular elbow. 1 at shoulder joint for caries necrotica centralis head of humerus.
„ „ forearm	1	1	...	...	...	...	...	...	...	1	...	1	...	For senile caries of wrist.
„ „ fingers	10	4	6	1	...	2	3	2	2	...	...	10	...	For crushes, &c.
„ „ thigh	2	2	...	...	...	...	1	...	1	...	...	2	...	At hip joint. 1 for morbus coxæ. 1 for periosteal sarcoma femur.
„ through knee	1	1	...	...	...	...	...	1	...	...	...	1	...	Re-amputation for conical stump.

Amputation of leg	1	...	1	...	...	...	...	...	...	...	1	1	...	Senile gangrene.
" " foot	1	...	1	...	...	...	...	1	...	...	...	1	...	Tubercular disease of ankle.
" " toes	1	1	...	...	...	...	...	...	...	1	...	...	1	Diabetic gangrene.
OPERATIONS ON THE SKIN:														
Ingrowing toe-nail	3	2	1	...	...	1	2	...	...	...	...	3	...	Avulsion.
Scraping lupus	2	...	2	...	2	...	...	...	...	...	...	2	...	
Pes planus	5	2	3	...	...	2	2	1	...	...	...	5	...	Wrenching.
Plastic for burn scars	2	2	...	1	...	1	...	...	..	...	...	2	...	
Carbuncle	1	1	...	...	...	...	1	...	...	...	...	1	...	
Furunculus	1	...	1	...	...	...	...	...	...	1	...	1	...	
Excision of Coccy	1	...	1	...	...	...	1	...	...	...	...	1	...	Coccydynia.
Parotid fistula	1	1	...	...	...	...	...	...	...	1	...	1	...	(Traumatic): Plastic.
Fistula of Wharton's duct	1	...	1	...	...	...	1	...	...	...	...	1	...	Excision of submaxillary gland.

TABLE IV.—*Table of Cases of Infectious Diseases admitted into the Surgical Wards,* 1895.

Sex.	Age.	Date of Admission.	Disease for which Admitted.	Result and Date.
F.	19 months	December 27, 1894	Cutaneous erysipelas	Recovered January 30, 1895.
M.	19	" 13, 1894	Cellulitis of hand	" " 1, "
M.	14	February 7, 1895	" " foot	" February 14, "
M.	23	December 31, 1894	" " leg	" January 23, "
M.	35	January 24, 1895	" " thumb	" March 14, "
M.	38	February 23, "	" " ischio-rectal fossa	" " 2, "
M.	31	March 3, "	" " hand	" " 30, "
M.	24	" 5, "	" " hand	" " 19, "
M.	34	April 10, "	" " forearm	" April 22, "
M.	52	May 17, "	" " forearm	" May 28, "
M.	42	" 15, "	" " hand	" " 28, "
F.	25	June 2, "	" " elbow	" June 26, "
F.	28	May 14, "	" " hand	" May 15, "
M.	28	October 9, "	" " hand	" October 15, "
M.	35	May 15, "	" " hand	" June 5, "
M.	51	October 2, "	" " scalp	" October 24, "
M.	30	" 17, "	" " buttock	" " 25, "
M.	60	" 5, "	" " hand	" " 29, "
F.	44	" 3, "	" " hand	" November 4, "
M.	20	" 30, "	" " ankle	" " 2, "
M.	51	December 11, "	" " scalp	Died December 20, "
F.	44	November 12, "	" " hand	Recovered December 13, "
M.	38	" 27, "	" " hand	" " 7, "
M.	68	October 7, "	" " finger	" " 12, "
M.	29	" 21, "	" " finger	" November 30, "

REPORT OF CASES IN "ARDEN WARD"

(FOR DISEASES OF WOMEN)

DURING THE YEAR 1895.

Number of cases in "Arden" on January 1st		9
Number of cases in "Arden" on December 31st		8
New cases admitted during the year		93
Total cases treated during the year		102
Cured and relieved	89	
Unrelieved	4	
Died	1	
Under treatment	8	
	—	102

Cases in "Arden Ward."

Nature of Case.	No. of Case.	Initials.	Age.	Result.	No. in Register.	Remarks, treatment, &c.
Uterus:						
Fibroid tumour	I	R. R.	32	Relief	U. 37	
	II	M. W.	46	"	U. 47	Prolapse of uterus in addition.
	III	A. P.	28	"	U. 67	Patient aborted whilst in Hospital.
	IV	C. T.	40	"	U. 84	Fibroid interstitial.
	V	E. W.	53	Unrelieved	U. 27	Sound passed, 10 inches.
" polypus	I	E. L.	44	Cured	U. 66	Removed by ecraseur.
	II	S. W.	45	"	U. 87	" "
Retroversion	I	E. B.	25	Relief	U. 59	Accompanied by menorrhagia.
	II	M. H.	39	"	V. 1	
	III	M. B.	46	"	V. 37	Menorrhagia; (?) fibroid menorrhagia.
	IV	M. M.	30	"	V. 82	Accompanied by dysmenorrhœa.
	V	F. C.	23		V. 88	Associated with obstinate constipation; still in Hospital.
	VI	M. W.	36	Relief	U. 48	Menorrhagia.
	VII	M. S.	46	Unrelieved	V. 11	Fixing of uterus.
Procidentia	I	E. L.	48	Relief	U. 61	Rectocele.
Subinvolution	I	L. S.	22	"	U. 58	Menorrhagia following abortion.
Cervix Uteri:						
Epithelioma	I	C. T.	37	"	U. 29	Scraped with sharp spoon and actual cautery applied.
	II	M. R.	63	"	U. 35	Actual cautery.
	III	N. J.	49	"	U. 45	Not suitable for local treatment.
	IV	D. W.	29	"	U. 46	" "
	V	L. S.	38	"	U. 50	Scraped and actual cautery applied.
	VI	M. B.	35	"	U. 53	Not treated locally.

	VII	A. G.	34	Relief	U. 57	
	VIII	E. J.	58	"	U. 63	Diseased tissues as far as possible removed, and actual cautery applied.
	IX	L. W.	28	"	U. 79	No local treatment.
	X	A. H.	48	"	U. 80	
	XI	S. W.	44	Unrelieved	U. 7	"
Sarcoma	I	M. J.	33	Relief	U. 49	Growth removed and actual cautery applied.
MENSTRUATION, DISORDERS OF						
Dysmenorrhœa	I	J. C.	22	"	U. 68	Retroversion of uterus.
Menorrhagia	I	A. H.	36	"	U. 20	
	II	M. G.	40	Cured	U. 28	Following abortion.
	III	E. T.	37	"	U. 44	"
	IV	H. H.	23	Relief	U. 72	"
	V	J. C.	34	"	U. 76	Subinvolution.
	VI	L. S.	22	"	U. 58	After abortion.
	VII	R. M.	42	"	V. 39	Os dilated with laminaria tent and Hegar's dilators, and interior of uterus curetted.
	VIII	C. C.	37	"	V. 15	Associated with retroversion.
	IX	C. U.	47	"	V. 63	
	X	A. I.	38	"	V. 53	Interior of uterus explored and malignant disease excluded.
	XI	E. P.	48	"	V. 45	
	XII	E. S.	42		V. 73	Still in Hospital.
Dysmenorrhœa and dyspareunia	I	J. P.	36	Relief	V. 19	Cervix incised and dilated.
PREGNANCY, DISORDERS OF:						
Abortion	I	A. P.	28	"	U. 67	Aborted in Hospital 4 days after admission.
	II	M. P.	28	"	V. 41	Threatened abortion.
	III	M. A.	27	"	V. 61	"

Cases in "Arden Ward"—*continued.*

Nature of Case.	No. of Case.	Initials.	Age.	Result.	No. in Register.	Remarks, treatment, &c.
Pregnancy, Disorders of:						
Abortion—*contd.*	IV	H. C.	22	Relief	U. 24	Aborted in Hospital a month after admission.
	V	I. D.	29	"	U. 25	Aborted in Hospital 2 days after admission.
Ruptured perineum	I	E. M.	35	"	T. 92	
Ovary:						
Tumours—						
Fibrosarcoma	I	M. A. C.	38	"	U. 69	Removed by abdominal section.
Cystic	I	A. S. G.	47	Cured	U. 70	Abdominal section.
	II	E. D.	61	"	U. 82	" "
Carcinoma	I	M. H.	48	Death	V. 5	Patient very emaciated; tumour rapidly increased in size, and ascites also developed rapidly.
Chronic ovaritis	I	C. H.	57	Relief	U. 36	
	II	J. B.	25	"	U. 51	Dysmenorrhœa.
	III	M. E.	34		V. 70	Still in Hospital.
Vagina:						
Prolapse	I	M. A. H.	39		V. 78	" "
Recto-vaginal fistula ...	I	E. J.	42	Relief	U. 71	
Vaginitis	I	M. F.	25	"	V. 27	Gonorrhœal.
Rupture of upper portion and probably adjoining portion of cervix uteri	I	H. C.	39	Cured	V. 55	After delivering child by version, the hand, on being introduced to remove placenta, passed into abdominal cavity; vagina was douched and plugged, and patient left Hospital well.

Labium:						
Cyst	I	E. R.	39	Cured	U. 80	Wall of cyst dissected out.
Abscess (recurring)	I	I. W.	44	"	V. 59	Labium dissected off, raw surface cauterised and allowed to granulate.
Papilloma	I	E. W.	24	"	U. 85	Growth the size of a small orange; weighed 3½ ozs.; removed by galvanic ecraseur.
Bladder:						
Incontinence of urine	I	A. T.	45	Cured	U. 39	Very slight.
	II	A. T.	64	Relief	U. 75	Urine alkaline, contains blood and pus.
	III	B. T.	56	"	V. 67	Associated with malignant disease of pelvic viscera.
Retention	I	E. B.	45	"	U. 77	Hysteria.
Dysuria	I	A. M.	53	Some relief	V. 65	Dysuria following old pelvic inflammation; dilatation of urethra and dissecting off tender spots from vulva afforded no relief. Most relief from washing out bladder with solution of quinine sulphate, 4 grs. to ℥ i.
Pelvis:						
Parametritis	I	E. L.	30	Cured	V. 29	Left parametritis; suppurated and was opened. Followed labour at term.
	II	C. B.	30	"	V. 23	Cold during menstruation.
Parametritis and perimetritis	I	E. M.	28	Relief	V. 51	After labour.
	II	A. M.	53		V. 65	Still under treatment.
	III	A. K.	30	Relief	U. 30	Chronic.
	IV	L. P.	21	"	U. 31	Left parametritis.
	V	R. G.	25	"	U. 33	
	VI	E. C.	42	"	U. 41	Chronic.
	VII	M. F.	33	"	U. 54	Terminated in abscess; incision in left iliac region and drainage.
	VIII	J. H.	35	"	U. 56	
	IX	R. K.	34	"	U. 60	After labour.
	X	E. W.	26	"	U. 65	Cold at menstrual period; suppression for 14 days.
	XI	A. M.	52	"	U. 81	Chronic parametritis.

CASES IN "ARDEN WARD"—*continued.*

Nature of Case.	No. of Case.	Initials.	Age.	Result.	No. in Register.	Remarks, treatment, &c.
PELVIS—*contd.*						
Encysted purulent peritonitis	I	L. C.	63	Relief	U. 64	Abdominal section and drainage.
Hæmatocele	I	A. J.	38	Cured	U. 34	Absorption.
	II	E. F.	24	"	U. 78	"
	III	K. S.	36	Recovering	V. 84	Still in Hospital.
UNCLASSIFIED:						
Chronic perityphlitis	I	I. R.	30	Relief	U. 16	
Constipation	I	A. W.	40	"	U. 32	
Coccygodynia	I	M. W.	53	"	U. 22	Retroversion and flexion.
Abdominal tumour (supposed)	I	M. A. B.	—	"	U. 38	Menopause.
Gastric ulcer (?)	I	A. G.	21	"	U. 40	Irregular menstruation.
Encysted ascites	I	S. B.	42	Cured	U. 43	Abdominal section.
Pregnancy	I	A. T.	33		U. 52	Originally received in Hospital, two days, for diagnosis.
Chronic gastritis	I	F. G.	42	Relief	U. 55	Menorrhagia.
	II	H. P.	54		U. 62	(?) Malignant; transferred.
Alcoholic delirium	I	A. T.	47	Relief	U. 73	
Debility	I	K. J.	67	"	U. 74	

Induced labour	I	E. L.	30	Relief	U. 86	Conjugate, diameter 3½ ins.; delivered by version.
Tubercular peritonitis...	I	S. H.	25	"	V. 33	Was in "Arden" in 1889 for same complaint.
	II	R. M.	35		V. 75	Still in Hospital.
"Bearing down" pains..	I	L. C.	33	Unrelieved.	V. 49	Hysterical.
Primary amenorrhœa ...	I	F. T.	18		V. 80	Patient had congenital heart disease and greatly enlarged spleen. Still in Hospital.
Chronic Bright's	I	J. F.	46		V. 86	Marked anæmia present. Still in Hospital.
Hydrosalpinx	I	J. H.	29	Cured	U. 26	Abdominal section.

REPORT

OF THE

POST-MORTEM EXAMINATIONS MADE IN 1895.

BY DR. HEBB.

CASES RECORDED		136
Males	81	
Females	55	
GENERAL DISEASES:		
Enteric fever	1	
Diphtheria	12	
Measles	2	
Septicæmia	1	
Tetanus	1	
Tuberculosis	17	
Syphilis	1	
Diabetes	2	
Rickets	2	
Marasmus	1	
	—	40
DISEASES OF THE NERVOUS SYSTEM:		
Hæmorrhage	1	
Softening	1	
Convulsions	1	
	—	3
DISEASES OF THE CIRCULATORY SYSTEM:		
Pericarditis	1	
Endocarditis	5	
Arteritis	3	
Embolism	1	
	—	10
DISEASES OF THE RESPIRATORY SYSTEM:		
Broncho-pneumonia	14	
Pneumonia	5	
Pleuritis	2	
Emphysema	4	
	—	25

Diseases of the Digestive System:		
Gastric ulcer	1	
Duodenal ulcer	1	
Appendicitis	2	
Ulceration of gall-bladder	1	
Jaundice	1	
Cancer	4	
Diarrhœa	2	
	—	12
Diseases of the Urinary System:		
Chronic nephritis	3	
Stricture of urethra	5	
	—	8
Diseases of the Lymphatic System:		
Sarcoma	1	
	—	1
Diseases of the Generative System:		
Pyosalpinx	1	
Cancer	3	
	—	4
Injuries and Surgical Operations:		
Hernia	6	
Necrosis	2	
Excision of tongue	1	
Otitis	3	
Abscess	2	
Cancer of cervical glands	1	
Ovariotomy	1	
Fracture of skull	2	
" neck	2	
" femur	2	
Burn	3	
Prussic acid poisoning	1	
Drowning	1	
Asphyxia	6	
	—	33

Short notes indicating the more important appearances and complications of the foregoing cases. The numbers from 30 *to* 170 *refer to the folios in vol.* ix. *of the P.M. Registers.*

General Diseases.

Enteric Fever.—131. F., 18. Pia mater much injected; spleen 12¾ ozs., dark, very soft. Characteristic enteric ulcers in lower half of ileum; several small circular ulcers in colon; mesenteric glands large, soft, pink.

DIPHTHERIA.—32. M., 3. Tracheotomy; antitoxin. Membrane on faucial and laryngeal mucosa. Mucosa of trachea and bronchi covered with sanious, mucopurulent fluid. Greater part of both lungs in condition of hæmorrhagic broncho-pneumonia. Hyperæmia of Peyer's glands. Rickets.

84. M., 3. Tracheotomy; antitoxin; membrane from fauces downwards to bronchi. Hæmorrhagic broncho-pneumonia. Hyperæmia of Peyer's glands.

88. F., $4\frac{2}{12}$. Antitoxin; diphtheritic rhinitis and pharyngitis. Some bronchitis and broncho-pneumonia.

91. M., 25. Antitoxin. Swelling of left submaxillary glands. Left tonsil large, indurated, and deeply ulcerated; the subjacent tissue of a dark red hue from capillary hæmorrhage. No membrane. Heart $14\frac{1}{2}$ ozs.; a few old pericardial adhesions. Gastro-intestinal mucosa acutely injected with numerous patches of capillary hæmorrhage throughout. Microscopical examination of the tonsil shows (*a*) an ulcerated surface with exudation and subjacent hyperæmia; many of the involved muscular fibres are swollen up, cloudy, and without any striation; (*b*) at one end of sections are racemose glands in early condition of epithelioma; hence the diphtheria supervened on a cancerous site.

108. F., $3\frac{4}{12}$. Chronic tonsillitis and broncho-pneumonia the only abnormal P.M. appearances. Had diphtheria, for which antitoxin was injected, and albuminuria, which passed off. Later, regurgitation of food, weakness of limbs, and vomiting. Knee jerks lost. Still later, palsy of diaphragm, increased weakness, and apathy. Died from syncope.

143. F., 4. Tracheotomy; antitoxin. Membrane on tonsils, larynx, and trachea.

151. F., $3\frac{1}{2}$. Tracheotomy. Membrane from epiglottis downwards as far as medium-sized bronchi. Numerous foci of hæmorrhagic broncho-pneumonia.

155. M., $2\frac{1}{2}$. Tracheotomy. Thick membrane on fauces, and from epiglottis downwards to bronchi, where it ends as a suppurative bronchitis. Lungs acutely insufflated with a few foci of hæmorrhagic broncho-pneumonia. Hyperæmia of Peyer's patches. Numerous stellate depressions on surface of right kidney; is smaller than left. Hypertrophy of left ventricle.

159. M., $1\frac{5}{12}$. Antitoxin. Thick membrane covering nasal

mucosa; none on faucial. From epiglottis downwards respiratory mucosa is covered with soft yellow membrane, ending as a suppurative bronchitis. Two-thirds of the lungs in condition of broncho-pneumonia.

162. F., 4¾. Antitoxin. Thick yellow membrane from anterior nares to pharynx. Membrane on palate, tonsils, and from epiglottis downwards to bronchi, ending as a suppurative bronchitis. Brain 42 ozs.; convolutions flattened; pia mater minutely injected and adherent to cortex, which is pink, as are also the basal ganglia.

165. M., 3½. Antitoxin. Respiratory mucosa from nares to bronchi is swollen, dusky red, granular in places, and covered with a thickish layer of saniopurulent mucus. There is no definite membrane. Lungs studded all over with areas of hæmorrhagic broncho-pneumonia.

115. M., 3. Antitoxin. Antitoxin injection site on abdomen is marked by swelling, discoloration, and hæmorrhagic extravasation into subcutaneous tissue. Much fluid in pleural sacs. Extensive broncho-pneumonia of both lungs. Bronchial mucosa covered with purulent mucus. Pancreas exactly 1 oz., unusually hard. Microscopical examination of antitoxin injection site shows a large area of infiltration of subcutaneous tissue with red corpuscles. There are almost no leucocytes, and from the general aspect of sections no exudation of plasma. There is no evidence of micro-organisms.

MEASLES.—92. M., 2½. Broncho-pneumonia; lymph on pleuræ. Fading rash on abdomen and upper extremities. Ringworm on scalp.

160. M., 1. Broncho-pneumonia; lymph on pleuræ. Both middle ears filled with greenish pus.

SEPTICÆMIA.—132. F., 34. Puerperal; uterus 4 ins., walls soft, pallid, flabby; adherent to fundus is polypoid organised thrombus; base size of a florin. Has apparently started from piece of retained placenta. Corpora lutea in both ovaries. Kidneys 14½ ozs.; numerous miliary abscesses in both.

TETANUS.—41. M., 47. Scar 1¼ in. long and ¼ in. broad over outside of left elbow; below scar, which is covered with scab,

the tissue is puckered, indurated, and pigmented (dark green). Hypostatic engorgement of lungs; osteo-arthritis. Microscopical examination (*a*) of scar shows granulation tissue with numerous large new vessels; hair sebaceous, and sweat follicles are surrounded by nuclei in excess; one or two collections of largish giant cells; presence of dirt in scar; nothing specially noteworthy about nerves; a large artery is blocked with granulation-exudation tunneled up by new channels, and in which are pigment granules; (*b*) spinal cord shows some hyperæmia, otherwise nil; (*c*) Gasserian ganglion; in places collections of leucocytes and excess of nuclei (evidence of recent activity); cells contain excess of pigment; presence of unequal-sized and irregular-shaped globules along nerves; presence of corpora amylacea or (?) small psammomata.

TUBERCULOSIS.—75. M., 10. Suppurative otitis; tubercular meningitis; much fluid in ventricles of brain; miliary tubercles in lungs, liver, spleen, kidneys, and intestinal mucosa. No enlarged, caseous, or (to the naked eye) tubercular lymphatic glands anywhere.

80. F., $\frac{7}{12}$. Caseous tubercular nodules in brain and lungs. Lymphatic glands are large, caseous, tuberculous, and some breaking down. Middle ears and mastoid cells filled with granular, curdy pus.

81. M., $3\frac{7}{12}$. Tubercular cerebro-spinal meningitis. No miliary tubercles elsewhere, but caseous nodule size of small marble in left lung. Broncho-pneumonia.

86. F., 28. Chronic phthisis.

101. M., 2. Thick pus in both middle ears. Small caseation in cerebral cortex. Caseous tubercular nodules in lungs and lymphatic glands; tubercular ulceration of intestine.

105. M., 1. Tubercular peritonitis and pleuritis. Tubercles in lungs, lymphatic glands, and kidneys. Ribs beaded; anterior fontanelle large; is surrounded by four large purple bosses of hyperæmic osseous tissue, resembling a hæmorrhagic periostitis. Microscopical examination sections merely showed an increased vascularity, *i.e.*, ossifying tissue in which the circulation channels were large; the channels contained but a scanty number of red corpuscles.

125. F., 47. Chronic phthisis.

136. M., 27. Chronic phthisis.

141. M., 61. Chronic phthisis.

146. M., 44. Tubercular meningitis; vocal cords overlap; right pleura much thickened and adherent; pigmented tubercular masses at apices of lungs; a few scattered tubercles in seat of pulmonary tissue, and also in liver and kidneys.

147. M., $1\frac{7}{12}$. Pia mater injected; cortex pink. Tubercles in lungs, lymphatic glands, liver, and spleen. Congenital atrophy of right kidney, which is represented by two small cysts and some tough fibrous tissue. Right testicle maldeveloped; the epididymis and body, both of which are atrophic and small, have not joined properly, but are at some $\frac{1}{4}$ in. apart and united by a thin cord.

149. M., 28. Tubercular laryngitis; chronic pleuritis; fibroid tubercular phthisis; empyema; tubercular ulcers of intestines and of pharynx.

150. M., 38. Chronic pleuritis; empyema; chronic pneumonic phthisis; nutmeg liver; cortical atrophy of kidneys.

152. F., $\frac{6}{12}$. Tubercular cerebro-spinal meningitis; otitis media; tubercles in thoracic and abdominal viscera.

158. M., 30. Tubercular caries of right first metatarsal bone; tuberculosis of left testicle and vesicula seminalis; tubercular ulcerative laryngitis, pharyngitis, and enteritis; lungs studded with miliary tubercles; tubercular caseous nodule size of small nut in pons varolii. The lymphatic glands throughout the body are extraordinarily large from tubercular caseation; many of them are breaking down; cover-glass preparations from the puriform juice of bone and testicle show vast crowds of tubercle bacilli.

SYPHILIS.—114. M., 45. Syphiloma $1\frac{1}{2}$ in. by $\frac{1}{2}$ in. in left half of pons. Pachymeningitis over left lobe of cerebellum and left temporo-sphenoidal lobe; the meningitis is expressed rather by adhesion to cortex than by thickening; the cortex subjacent is atrophied. Left gasserian atrophied; about half the size of right. Descending atrophy of medulla oblongata. Left eye absent. Muscles of left side of larynx are pallid and distinctly atrophied. Well-marked syphilitic aortitis. Mass of pigmented fibrous tissue at base of right lung; the superjacent pleura is thick, white, and opaque. Microscopical examination

of tumour shows circumferential area of granulation tissue enclosing a few giant cells; the central core is fibro-caseous.

DIABETES.—35. F., 43. Cortex of kidneys slightly granular; blood in heart and vessels fluid; pancreas normal, 3 ozs.

37. M., 38. Pancreas $2\frac{1}{2}$ ozs., flabby; liver 96 ozs.; kidneys 19 ozs.; spleen 13 ozs.; gangrene of right lung.

RICKETS.—50. F., $1\frac{1}{12}$. In upper jaw four teeth quite through, and another nearly so. Mucosa around two of these is swollen, spongy, and dark purple, but not bleeding or ulcerated. Weight 4 lbs. 7 ozs.; ribs slightly beaded; head large; irregular and defective ossification of skull cap. The ossification centres at lower ends of femora are represented by large, soft, spongy areas, or rather in the epiphysial extremity is a cavity filled with soft, red, spongy tissue.

MARASMUS.—98. M., $\frac{6}{12}$. Brought in dead. Digits of feet and hands in position of carpo-pedal contraction; mucopurulent fluid in middle ears; brain thoracic and abdominal viscera normal, bar the wasting. A little thin milky fluid in stomach. Adipose tissue almost absent. Weight 5 lbs. 3 ozs. Average weight at this age is 8 lbs. 7 ozs.

DISEASES OF THE NERVOUS SYSTEM.

HÆMORRHAGE.—134. F., 68. Hæmorrhage ploughing up left basal ganglia, adjacent white matter, and breaking through to the surface at the sylvian fissure, whence it has spread over the base. No blood in ventricles. Arteries atheromatous. Chronic osteo-arthritis. Kidneys normal.

SOFTENING.—135. F., 55. Posterior third of right cerebral hemisphere in condition of yellow softening; practically the area supplied by posterior cerebral artery. Right crus soft, flabby, and smaller than left. The cerebral arteries are in advanced condition of atheroma, the right middle cerebral especially so. Indeed, all the arteries of the body are extremely atheromatous. Adherent to wall of right common iliac is an ante-mortem clot, $\frac{3}{4}$ in. in diameter. The aortic end of right renal artery is

plugged by clot similar in appearance to that in common iliac; the right kidney is of a dark purple hue; some cortical atrophy of both kidneys. Hypertrophy of left ventricle. Microscopical examination of middle cerebral artery shows extreme endo-arteritis, the lumen being almost obliterated. The thickening is due to fibrosis; there is no caseation or calcification as in the arteries of trunk and extremities.

Diseases of the Circulatory System.

Pericarditis.—118. M., ¾. In pericardial sac are several drachms of purulent fluid, and the serous surface is covered with thick shaggy layer of greenish yellow lymph. Endocardium normal; purulent fluid and lymph in both pleural sacs; lungs subcrepitant. Bronchitis.

Endocarditis.—48. F., 26. Heart 14 ozs. Stenosis of mitral and tricuspid valves; aortic cusps thickened, rough, and slightly recurved; wall of left ventricle very thin; left auricular appendix plugged with firm granular decolorised clot. Viscera cardiac.

60. F., 37. Heart 18 ozs.; shape globose. Stenosis of mitral; other valves nil. Hypertrophy of right ventricle. Viscera cardiac. Two scars of gastric ulcers on anterior and posterior surfaces about ¾ in. from lesser curvature and 2 ins. from œsophageal aperture.

79. F., 7. Recent vegetations on mitral and aortic valves. Endocardium of left auricle thick and opaque, but fairly smooth. Large quantity of fluid in pleural and pericardial sacs; in the latter the surface is covered with blood-stained lymph. Viscera cardiac.

142. F., 31. Heart 16½ ozs.; pericardium adherent in front. Mitral flaps thickened, adherent, and orifice stenosed. Tricuspid flaps thickened. Recent vegetations on tricuspid, mitral, and aortic valves. Both auricles are dilated and hypertrophied. Five pints of dark yellow purulent fluid in right pleural sac; pulmonary pleura covered with thin layer of recent lymph. Lung collapsed. Viscera cardiac.

168. F., 34. Heart with pericardium, which is universally and firmly adherent, 29 ozs. Tricuspid and mitral flaps adherent

and orifices stenosed. Mitral thickened and rough with calcareous deposit. Both auricles are extremely large, quite the bulk of large closed fist, distended with soft black clot. Left auricular appendix choked with adherent, firm, partially decolorised granular clot. Viscera cardiac.

ARTERITIS.—47. M., 47. Aneurysm, size of fœtal head, of transverse arch of aorta. Projection forward, but also presses on root of left lung. Wall of aneurysm thick; contents, firm laminated fibrinous clot and some soft black clot. Heart small; endo- and pericardia normal. Arteries atheromatous. Left pleura very thick; sac contains about 2 pints of clear serous fluid; lung lies collapsed and carnified against aneurysm. Left recurrent laryngeal nerve is lost on wall of aneurysm. Atrophic sclerosis of upper and lower surfaces of left lobe of cerebellum. Old badly united fractures of middle third of both legs. Old fracture of right elbow.

71. F., 72. Arteries in advanced condition of calcareous atheroma. Heart 11½ ozs.; hypertrophy of left ventricle. Calcareous deposit in cusps of aortic valve; bronchitis; calcareous deposit in walls of bronchi. Kidneys 13½ ozs., granular. Diffuse suppuration of plantar cellular tissue. Chronic arthritis.

123. M., 43. Aneurysm, size of golf ball, in transverse arch; sac filled with firm, tough clot; recurrent laryngeal is stretched over and incorporated with wall of sac. Aneurysm has ulcerated into left bronchus; trachea, bronchi, and stomach full of blood. The whole of aortic arch is dilated and sacculated from chronic atrophic aortitis. Other arteries fairly normal. Aortic cusps thickened and recurved and valve incompetent, but there is no dilatation, and but little hypertrophy of left ventricle.

PULMONARY EMBOLISM.—34. F., 32. Left internal iliac vein and branches plugged with firm decolorised adherent granular clot; no œdema of lower extremity. Left pulmonary artery plugged with firm, slightly adherent, granular clot, which is fluid in centre, and from 2 to 3 ins. long. Heart 7 ozs.; cavities contain fluid blood only. Lungs œdematous, but otherwise not specially noteworthy. Uterus large; os patulous; mucoid discharge from uterus. Left ovary contains cyst size of

a pigeon's egg; fallopian fimbriæ adherent; right appendages normal; lineæ albicantes; osteo-arthritis. Was admitted for hæmatemesis and anæmia. Gastric mucosa somewhat granular. Liver and œsophagus nil.

For another case of pulmonary embolism see under Fracture of Femur.

BRONCHO-PNEUMONIA.—69. F., 12. Was admitted for pain and swelling of right hip-joint, which was opened and an oily fluid evacuated. Tissues around surgical wound are infiltrated with sanious pus (3 to 4 drachms); small quantity of pus and lymph in joint cavity; cartilages quite smooth; other joints nil. Broncho-pneumonia with some deposit of lymph on pleura.

102. M., 57. Broncho-pneumonia, chiefly of right side, with deposit of lymph. Suppurative bronchitis. Brain 46 ozs. Numerous collections, some quite large, of greenish yellow pus in subarachnoid space of cord and brain. Cover-glass preparations of pus stained with alkalin methylin blue show a few collections of reniform diplococci with halo.

127. M. $\frac{7}{12}$. Rickets; excessive subarachnoid œdema. Atrophy of thymus. (Diarrhœa.)

148. F., $1\frac{1}{4}$. Otorrhœa; both middle ears and mastoid cells are full of pus, and the bone around some of the cavities is bare. Liver fatty, $16\frac{3}{4}$ ozs.

PNEUMONIA.—33. M. 36. Chronic indurative ostitis (focal) below right great trochanter, with fistulous passages and much fibrosis in subcutaneous tissues of thigh. Right pleura thickened and adherent (old). Gray hepatisation of right upper lobe. Left lower lobe in transition stage of red to gray hepatisation, with superjacent recent pleuritis.

76. M., 38. Both pleuræ much thickened and universally adherent. Right lung hypertrophied; left atrophied, much fibrosed, and the bronchi dilated and sacculated. Fibrosis with pigmentation of right upper lobe. Right lower lobe in condition of gray hepatisation.

78. F., 26. Gray hepatisation of left upper lobe; bronchi plugged with fibrin. Much turbid fluid and lymph in right pleural sac; collapse of right lower lobe. Mediastinal tissue

much swollen from exudation of inflammatory products. Uterus large, in condition of subinvolution; os fissured. Mucosa of fundus covered with thickish layer of grayish soft deposit, easily scraped off, roughly resembling a soft diphtheritic membrane; subjacent tissue smooth. Ovaries large; large corpus luteum in right. Pericardium much thickened, and covered with shaggy coarse lymph; much greenish-yellow turbid fluid in sac. In the pericardial lymph are numerous diplobacilli with pointed ends and surrounded by capsules (Pneumo-coccus).

90. F., 39. Whole of right lung in condition of gray hepatisation. Pleura covered with recent granular lymph.

99. F., 52. In left pleural sac are from 2 to 3 pints of orange-yellow coloured purulent fluid and much yellow lymph. The left lower lobe is collapsed and carnified; the upper is in condition of gray hepatisation; bronchi plugged with fibrin. Right pleura universally adherent; adhesions old and thin. Lung engorged. Liver 55 ozs.; well-marked tight lacing transverse fissure dividing the lobes into anterior and posterior moieties. Mediastinal glands are large, much pigmented, indurated, friable, calcified. Uterus large; left latero-version; os circular, small; uterine canal dilated. Ovaries atrophied; fimbriæ adherent.

PLEURITIS.—55. M., 29. Pleura over right lower lobe covered with soft yellow lymph. Elsewhere the pleuræ are normal. Lungs œdematous, and right lower lobe somewhat engorged and friable. Suppurative bronchitis. In both lungs are a few small firm nodules of pigmented fibrous tissue with central core of calcification. Brain 49 ozs. Pia much injected; cortex pink. Middle ears nil.

112. M., 54. Localised empyema cavity at right base; contents about 5 ozs. of thick curdy pus; limiting membrane, though thick, is soft and comparatively recent. Rest of pleuræ smooth and shiny. Small area of pneumonic consolidation at bottom of right upper lobe; lower lobe somewhat compressed by the empyema. Suppurative bronchitis. Heart 9½ ozs.; in aortic valve is a spheroidal mass of ulcerative endocarditis size of a pea. Rest of endocardium normal. Brain 52 ozs. Cerebro-spinal subarachnoid tissue infiltrated with greenish purulent exudation. Middle ears nil. Microscopical examination of the

pus from cerebral subarachnoid space (gram and alkalin methylin blue) shows large numbers of cocci with capsules; some are in cells; small chains are frequent.

EMPHYSEMA.—56. F., 35. Surface livid; left arm much swollen and almost black; veins of left upper extremity completely blocked with softish black clot. Emphysema. Bronchitis. Bronchi large. Lungs large, heavy, œdematous; numerous areas of diffuse hæmorrhagic extravasation. Chronic pleuritis; much fluid in both pleural sacs. Heart 14 ozs.; right side dilated and hypertrophied. Endocardium normal. Viscera cardiac.

65. M., 57. Costal cartilages ossified; pleuræ thickened and universally adherent. Lungs large, pigmented. In most parts there is well-marked emphysema, which in places is extreme; in others there are areas of pigmented fibrosis with puckering of the pulmonary tissue; considerable dilatation and thickening of the bronchi. At the right base there is some recent broncho-pneumonia. The pulmonary mucosa is covered with a thickish layer of sanio-purulent mucus. Heart 14½ ozs.; considerable hypertrophy of right ventricle.

110. M., 44. Chronic pleuritis of both sides; right pleura thickened and adherent over upper half of lung; elsewhere the adhesions are, though old, thin and scanty. No fluid in sacs. Lungs collapsed and small. Both lungs are much puckered from disseminated pigmented fibrosis. The non-fibrosed parts, with the exception of the right lower lobe, are so many large air bags. Only at the right base is any aërating tissue left. Both lungs are much pigmented. The bronchi are dilated and their walls thick. Heart 19 ozs.; ventricles dilated; walls thin; cavities filled with soft black clot; adherent to apex of both ventricles is an antemortem polypus. Viscera cardiac. Considerable anasarka; skin almost livid from congestion; much ascitic fluid; none in pleural sacs.

120. M., 16. Right pleura universally adherent; adhesions old and thin. Left pleura free, smooth, shiny. Lungs large, emphysematous, pallid, and œdematous. Bronchi dilated. Tracheal and bronchial mucosa dark red, covered with thick layer of grumous, granular, foul-smelling, yellowish muco-pus. Numerous patches of broncho-pneumonic consolidation. No caseation or breaking down anywhere. Heart 9 ozs.; hyper-

trophy of right ventricle. Finger ends clubbed. Slight œdema of feet.

Diseases of the Digestive System.

Gastric Ulcer.—42. F., 60. Sharp punched-out ulcer on lesser curvature, half-way between the two apertures. Pyloric opening much stenosed, rigid, but not thickened, and no appearance of cicatrisation; aperture just admits No. 10 catheter. Mucosa of stomach in condition of moderate chronic gastritis.

Duodenal Ulcer.—130. M., 45. Perforating punched-out circular ulcer on anterior aspect of duodenum close to pylorus. Diameter $\frac{3}{8}$ in. Stellate scar on gastric mucosa just inside ring. Acute general peritonitis. Several pints of puro-semifæculent fluid and yellow lymph in peritoneal sac. Surgical wound 3 ins. long just above anterior portion of right iliac crest.

Appendicitis.—38. M., 21. Proximal half of vermiform appendix sloughed away; close by lay a fæcal calculoid of the size and shape of a date stone. Acute general peritonitis.

113. M., 15. About $\frac{3}{4}$ in. from distal end of appendix is a small perforation. No calculoid or foreign body was found. At the proximal side of the ulcer the appendix is blocked by adhesions; the aperture into the gut is quite patent. Acute general peritonitis. Three surgical wounds in abdomen; one in median line below umbilicus, the other two are just above the middle of Poupart's ligaments.

Ulceration of Gall-bladder.—66. M., 45. Acute general peritonitis; in sac are nearly 2 pints of orange-coloured purulent fluid. At anterior extremity of gall-bladder, which is nearly empty, is an ulceration hole, through which bile is escaping. Close by there is puckering of the gall-bladder, due to inflammatory adhesion between the bladder and liver; in this cicatrix some biliary calculi are enclosed. Within the bladder is a gall-stone the size of a large marble. The passage from the duodenal papilla is wide, and a large probe passes easily therefrom out at the ulceration hole at the end of gall-bladder. Surgical wound 5 ins. long between pubes and umbilicus.

JAUNDICE.—30. M., 45. Deep universal jaundice. Gall-bladder empty. Liver 84 ozs., smooth, of a dark green colour, firm, otherwise nil. No dilatation of bile ducts. Bile ducts pervious; probe passes easily from or to papilla. No enlarged lymphatic glands. Deposits of urate of soda in joints. Microscopical examination of liver fails to reveal any striking abnormality. There are scattered collections of black pigment granules, arranged in irregular lines, with a radiating disposition in a few places. The liver cells seem normal. The portal canals are decidedly in evidence from some excess of fibrous tissue and the presence of nuclei or leucocytes. The bile ducts are not dilated.

CANCER OF ALIMENTARY TRACT.—62. M., 65. Cancerous stricture of œsophagus from level of cricoid downwards for about 2 ins. The cancerous deposit has ulcerated, and communicates with right lung by a fistulous passage. The tissues around stricture are much infiltrated, especially on right side of neck behind clavicle, the infiltration thus reaching the apex of right lung, which is adherent all round. The cancer has also eaten into trachea, where it appears as bosslike deposits in the mucosa. The upper lobe of right lung is pneumonic, and its superior half gangrenous.

83. M., 25. Piece of gut at junction of descending colon with sigmoid had been removed for cancerous stricture at this site and an artificial anus made. There was evidence of early peritonitis. The piece of gut removed was much stenosed from infiltration with colloid cancer.

57. M., 58. Anal orifice much indurated and stenosed. Numerous fistulous passages from about anus ramify in pelvic cellular tissue; one passes through right sciatic notch into upper part of right thigh, where there are large cavities filled with puro-fæculent fluid; these passages open on the inside of the thigh by a narrow orifice. On cutting out the rectum the last 1½ in. of the gut is found to be much thickened from tough cancerous deposit; the gut immediately above is much dilated. The rest of the alimentary canal is quite normal. Secondary deposits in liver. Gray hepatisation of both lower lobes.

CANCER OF BILE DUCT.—137. M., 40. Deep general jaundice.

Liver 56 ozs., of a blackish green hue and of fairly normal consistence. The gall-bladder and bile ducts are enormously distended and very tense; they contain a thin, viscid, black fluid. Round about the end of bile duct, just where it abuts against the gut, is a soft spheroidal mass about 1½ in. in diameter. From the papilla a large probe passes easily through the mass into gall-bladder and ducts; the pancreatic duct is also pervious. On opening up the mass it is found to be a soft disintegrated new growth implicating the end of common bile duct, and blocking this and the pancreatic duct. The pancreatic duct is greatly sacculated; the saccules contain a thin, milky, viscid fluid; the rest of the pancreatic tissue is indurated and shrunken. The upper prevertebral abdominal glands are enlarged and infiltrated. Angular curvature involving last seven dorsal vertebræ, in connection with which there is an intermuscular abscess behind the left kidney. The aorta is almost bent on itself at the curvature. Microscopical examination of the abdominal lymphatic glands shows columnar epithelioma. The original site was too disorganised for histological purposes.

Diseases of the Urinary System.

Chronic Nephritis.—70. F., 40. Kidneys 8 ozs.; capsule adherent, surface finely granular, cortex diminished; colour brick red; consistence firm. Heart 14 ozs.; great hypertrophy of left ventricle. Liver 41 ozs., nutmeg; deep, broad, lacing furrow. Spleen 4 ozs., firm, dark, free; projecting from convex surface is an indurated node size of a walnut, part of which consists of fibrous cicatricial tissue, and part of a firm, dark red-purple fleshy mass divided up into lobules, no resemblance to an infarct or to normal splenic tissue. On microscopical examination the tumour resolves itself into fibrous tissue of varying consistence (possibly of congenital origin), thus giving rise to a kind of cirrhosis; normal splenic appearances are quite absent. Lungs large, emphysematous. Bronchitis. Broncho-pneumonia. Hæmorrhagic infarct size of turkey's egg at base of right lung.

72. F., 61. Kidneys 2½ and 5 ozs.; capsules adherent, surfaces granular and much depressed in places, especially in right; cortices atrophied; consistence firm; colour dark red.

Two ureters and three renal arteries to both kidneys. Heart $8\frac{1}{2}$ ozs.; hypertrophy of left ventricle. Lungs emphysematous. Bronchitis; upper portions of both lungs indurated from presence of pigmented fibrous tissue. Purple discoloration of skin of both lower extremities, most extensive on left, where it reaches to buttocks; in right is confined to leg. Left leg firm, tense, no pitting. On incision the purple discoloration is found to be due to diffuse extravasation of blood in the subcutaneous tissue, between and also to some extent into the muscles.

117. M., 7. Kidneys 10 ozs., "large white"; surface smooth; capsule strips easily; cortex large; buff-coloured to yellow; pyramids purple; consistence flabby. Heart $7\frac{1}{2}$ ozs.; hypertrophy of left ventricle. Œdema of aryepiglottic mucosa and of lungs; much fluid in pleural sacs; considerable anasarka. All the viscera and tissues are pallid and exsanguine. No reaction with iodine.

STRICTURE OF URETHRA.—43. M., 56. Tight stricture 2 ins. in front of bladder; just behind stricture a surgical opening into urethra. Several false passages. Slight hypertrophy of bladder and some cystitis. Kidneys 13 ozs., not specially noteworthy. Body very adipose, weight 22 stones. All the tissues and organs are much blood-stained, very soft and fatty.

44. M., 52. Mucosa of membranous and posterior part of penile urethra much thickened and indurated, chiefly on the lower surface. In front of the thickening there is an ulceration hole, with diffuse peri-urethral suppuration. Chronic cystitis; mucosa of bladder villous and shaggy. Right kidney, which has two ureters, much atrophied; calices and pelvis much dilated and their mucosa thick, velvety, and of a dark red hue. Left kidney fairly normal. Vesiculæ seminales very large from chronic interstitial inflammation, the saccules being but little dilated. Several small septic abscesses in lungs; lower lobes of lungs covered with yellow lymph. Several small patches of cortical softening of cerebrum.

45. M., 40. Surgical wound in floor of urethra, in front of which the mucosa is thick and rough. Wall of bladder hypertrophied; mucosa smooth and white. Diffuse hæmorrhagic extravasation round about bladder and penis and muscles of

abdomen. Peritonitis. Oval punched-out ulcer $\frac{3}{4}$ in. long in first part of duodenum.

68. M., 54. Large mass of fibrous tissue in perinæum and around base of penis, enclosing two cavities joined by a narrow orifice; from the posterior one was removed a calculus 2 ins. long and weighing $\frac{1}{2}$ oz. Together the two cavities form a passage from the bladder to a surgical perinæo-scrotal wound. Their internal aspects are rough and sloughy-looking. Wall of bladder thick and sacculated; mucosa dark green. The urethra is patent only for 4 ins., and is closed at the first sac, the urine having been voided through the artificial aperture for about 20 years. Ureters much dilated. Slight atrophic nephritis. Liver fatty. Left ventricle hypertrophied; slight chronic arteritis.

163. M., 41. Tight stricture at anterior part of membranous urethra. Bladder hypertrophied; cystitis; ureters much dilated. Kidneys $9\frac{1}{2}$ ozs.; miliary abscesses in right. Surgical wound 1 in. long in middle line of perinæum.

Diseases of Lymphatic System.

Sarcoma.—138. M., 48. Mediastinal and cervical glands much enlarged from infiltration, with firm, white malignant growth, which has invaded the right lung, setting up gangrene thereof, and producing an empyema in right pleural sac. Secondary deposits in liver. Microscopical examination of the growth showed it to be a small round-celled sarcoma. The microbe of the empyema pus is streptococcus, forming very long chains.

Diseases of the Generative System.

Pyosalpinx.—156. F., 41. Chronic pelvic cellulitis burrowed up by cavities and fistulous passages. Large abscess cavity at top of sacrum in connection with gut (recto-sigmoid junction) on one hand, and on the other by fistulous passage with bladder. Double pyosalpinx. Latero-version of uterus. Cystitis. Kidneys 16 ozs., "large white." No reaction with iodine.

Cancer.—140. F., 44. Cancerous infiltration of uterus ($1\frac{1}{4}$ ins.), principally of lower half. Internal aspect ragged from

breaking down of the growth. Secondary deposits in ovaries, peritoneum, lymphatic glands, lungs, and vagina, wherein it takes the form of thickening with ulceration. Microscopical examination of uterus shows that its tissue is hollowed out into alveoli filled with round cells. These are, however, the nuclei, the cytoplasm being small and soft. Most of the alveoli show degeneration appearances (caseation). In a few places are collections of endothelial cells, and in many the degenerated (keratinised) remains of these cells. The appearances in the vagina are of the same character.

109. F., 53. Right ovary represented by white, tough, warty mass size of a hen's egg; the left ovary by a compound cystic mass size of an orange; contents of cysts yellowish and containing much cholesterin. Inside these cysts are numerous warty growths springing from the walls of the cysts. Uterus (cavity 5 ins.) is bossed all over with numerous large myomata, some of which are calcifying. The peritoneum is much thickened, partly from chronic peritonitis, partly from cancerous infiltration. Liver 110 ozs., fatty. Spleen 12¾ ozs., soft almost to diffluence. Kidneys 19 ozs., not specially noteworthy except for size; ureters and pelves dilated from pressure below. Several quarts of thin sanious fluid in right pleural sac; lung carnified, not larger than a golf ball. Left lung œdematous. Heart 12 ozs., adipose. On account of the enormous size of the body, which was extremely adipose and waterlogged, the P.M. examination was made in the mortuary; there were several gallons of ascitic fluid. Microscopical examination: carcinoma.

139. F., 48. Chronic peritonitis; intestinal coils much matted together and pushed upwards by cysto-solid growth size of an adult head. This is a cancerous degeneration of right ovary, the upper portion being solid, the lower cystic. The solid portion is a suppurating mass of broken-down cancer. The cystic contents are yellow, slightly viscid, and contain much cholesterin. The left ovary is flattened and elongated, but otherwise normal. Uterus of normal size. Kidneys 8¼ ozs., granular. Heart 9¾ ozs.; pericardium universally and firmly adherent. Microscopical examination of ovary shows it to be carcinoma. The cells are very large, and there are numerous cell-inclusions having very various appearances.

Injuries and Surgical Operations.

Hernia.—77. M., 51. Strangulated right inguinal; 2 ft. of gut above constriction gangrenous; no peritonitis.

40. M., 54. Operation for omental inguinal hernia. Sac and testis excised. Suppurative peritonitis. Chronic gastric ulcer on lesser curvature. Heart 13 ozs.; hypertrophy of left ventricle; chronic arteritis; lungs emphysematous. Chronic osteo-arthritis with erosion of joint cartilages.

100. M., 51. Operation for strangulated femoral hernia. Peritonitis from rupture of gut where it had been nipped, 60 ins. above ileo-cæcal valve.

133. M., 50. Admitted moribund for strangulated left femoral hernia; the constricted portion is 8 ins. of jejunum. Heart 22½ ozs. with pericardium, which is firmly and universally adherent; mitral stenosis; aorta atheromatous with aneurysmal bulgings.

170. M., 43. Knuckle of ileum 38 ins. from ileo-cæcal valve together with some omentum firmly nipped by right internal ring. The tunica vaginalis is continuous with peritoneal sac (congenital) and the testicle is small; to it is adherent a strip of omentum (old); left testicle absent and inguinal canal closed (radical cure with removal of testicle for strangulated congenital inguinal hernia).

53. F., 38. Operation for strangulated femoral hernia. Greater part of small intestine swollen and of a purple hue, the central moiety being in condition of gangrene; no thrombosis of veins or arteries; no peritonitis, but about 5 ozs. of reddish brown, clear fluid in sac; no distension of gut. Kidneys 6½ ozs. Chronic atrophic nephritis. Uterus 4½ ins. long by 3 ins. across fundus; contains fœtus of about 2 months; corpus luteum in left ovary.

Necrosis.—49. M., 29. Necrosis of right side of upper and lower jaws; soft tissues around sloughy and gangrenous. Liver 75 ozs., fatty. Heart 14 ozs., adipose. Small indurated chancre on prepuce.

58. M., 48. Necrosis of 5th lumbar vertebra and upper portion of sacrum; between the two a cavity, from loss of part of body of 5th lumbar vertebra, leading externally by fistulous

passages to left innominate bone. The pelvic cellular tissue about sacrum and left innominate bone is much thickened. The necrosed bone is hard and black. Chronic pleuritis; pneumonia.

EXCISION OF TONGUE.—85. F., 58. Operation for epithelioma linguæ, for which the tongue and floor of mouth had been removed. Viscera and tissues pallid and exsanguine. Kidneys slightly granular.

OTITIS.—161. M., 27. Double otitis media. Abscess in right temporo-sphenoidal lobe. Trephining of mastoid cells and exploration for abscess. Broncho-pneumonia; suppurative bronchitis.

164. M., 51. Left otitis media. Trephining of left mastoid cells. Erysipelas; suppurative cerebro-spinal meningitis (streptococci).

166. M., 41. Double otitis media. Trephining of mastoid cells and exploration for abscess. Abscess size of a small nut at upper and anterior edge of right half of cerebellum.

ABSCESS.—36. F., 35. Perinephritic abscess, the left kidney being represented by a mass of fibrous tissue; two large sub-peritoneal abscesses, one in pelvis, the other in upper abdomen. Chronic peritonitis.

104. M., 69. Abscess of right psoas muscle extending into upper part of thigh through crural canal. Contents of abscess are fæco-purulent; communication with ascending colon by small round aperture. No disease of bone or peritonitis. Chronic pleuritis; bronchitis; pneumonia.

CANCER OF CERVICAL GLANDS.—94. M., 49. Right side of neck infiltrated with new growth of cancerous nature. The tissues are indurated with large ragged central cavity opening externally. Œdema of aryepiglottic mucosa. Pneumonia.

OVARIOTOMY.—126. F., 49. Recent laparotomy wound. Uterine appendages absent. Uterus normal. Left kidney reduced to a fibrous sac filled with pus; ureter blocked by uric acid calculi. Right kidney 8½ ozs., normal.

FRACTURE.—46. F., 60. Neck broken between 2nd and 3rd cervical vertebræ, the cartilage being separated from the bone. Fracture of clavicle, six ribs, lower jaw, and larynx. Chronic nephritis.

154. M., 37. Neck broken between 4th and 5th cervical vertebræ. Spinal cord exposed. Fracture of lower jaw and hyoid bone.

106. F., 25. Fracture of base of skull; some bruising of cortex. Hæmorrhage into arachnoid sac. Œdema and hypostatic engorgement of lungs. Chronic pelvic peritonitis. Double hydrosalpinx. Uterus small.

153. M., 69. Fracture of base of skull with bruising of cortex cerebri; fracture of second right costal cartilage. Pneumonia.

121. M., 65. Comminuted intracapsular fracture of left femur. Firm adherent clot spreading from left femoral and iliac veins to inferior cava; both pulmonary arteries are embolised with clot similar to that in cava; greater part of lower lobe of right lung is collapsed, carnified, and engorged; is of a blackish purple hue, and its surface is covered in places with recent lymph; chronic osteo-arthritis; costal cartilages ossified; osteophyte in falx cerebri; thyroid large, indurated, colloid.

128. F., 58. Oblique intracapsular fracture of left femur; left femoral vein and branches plugged with firm, adherent, partially decolorised clot, which reaches just to Poupart's ligament; ulcerative colitis with perforation of gut and extravasation of fæces into peritoneal sac. Healed lacerations of liver; gangrenous cystitis.

BURN.—97. F., 11. Burns of 3rd and 4th degrees involving anterior surface and sides of trunk and neck.

116. F., 27. Burns of 3rd degree involving trunk and extremities; mucosa of mouth and tongue white, dry, and peeling; mucosa of epiglottis charred; uterus lateroverted; endometritis; fimbriæ adherent to ovaries, which are cystic; hydrosalpinx.

144. F., 60. Granulating sores involving left upper arm and scapular region; chronic pleuritis; chronic phthisis (pigmented fibrosis, fibroid tubercles, vomicæ); heart, with pericardium, 13½ ozs., which is universally and firmly adherent; mitral

stenosis. Liver 38 ozs., lacing furrow. Kidneys 7½ ozs. Chronic atrophic nephritis; tubercular ulcers of colon; small intestine nil.

PRUSSIC ACID POISONING.—119. M., 48. Several drachms of odourless, pale-yellow, clear fluid escaped from œsophagus; stomach contracted; mucosa swollen, velvety, of dark cherry-red hue; 2—3 ozs. of yellow fluid and some semi-digested vegetable matter, having faint odour of prussic acid, in stomach; hyperæmia of duodenal mucosa; contents of duodenum semi-fluid and brick red; well-marked rigor mortis; hands clenched. Chronic pleuritis; chronic phthisis. Heart 12 ozs., hypertrophy of left ventricle; blood fluid, dark. Kidneys granular, cystic. Brain 43 ozs. Dura adherent; subarachnoid œdema; nervous tissue nil.

DROWNING.—145. F., 41. Attempted suicide from drowning. When admitted was suffering from shock, but her breathing was good. Died suddenly a few hours after admission. Heart 11 ozs.; in systole; right heart flaccid, left contracted; wall of ventricle thick; blood in cavities frothy, with small amount of decolorised clot; frothy mucoid fluid in larynx and trachea. Lungs large, emphysematous, very œdematous. Stomach distended with gas; a few ounces of semi-digested, green-coloured food. Liver 68 ozs., dark brown, firm, well-marked transverse "lacing" furrow. Uterus large; mucosa soft, flabby, almost villous, covered with thick creamy fluid. Recent corpus luteum, size of small nut, in right ovary; three yellow corpora in left, one cystic.

ASPHYXIA.—Six cases of infants brought in dead from overlying.

For other surgical cases see also under—

Broncho-pneumonia, 69.
Pneumonia, 33.
Duodenal ulcer, 130.
Appendicitis, 113.
Ulceration of gall-bladder, 66.
Cancer of intestine, 57, 83.
Stricture of urethra, 43, 44, 45, 68, 163.

MEDICAL REGISTRAR'S REPORT FOR THE YEAR 1896.

By Dr. J. PORTER PARKINSON.

Number of patients in Hospital, Dec. 31st, 1895		64
Admitted to Medical Wards during 1896		1,057
Average number of patients in Hospital		80·07
Average stay of each patient in Hospital		27·65 days
Recovered or relieved		856
Males	485	
Females	371	
Unrelieved, including those transferred to Surgical or Obstetric Wards		52
Males	24	
Females	28	
Died		149
Males	86	
Females	63	

The mortality during the year was 13·29 per cent.

TABLE A.

DISEASE.	Jan. to March.	April to June.	July to Sept.	Oct. to Dec.	Sex.			Age.							Result.					
					Males.	Females.	Total.	Under 5 yrs.	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved.		Relieved.	
																M	F	M	F	M	F
GENERAL DISEASES:																					
Group A:																					
Enteric fever	10	4	10	11	18	17	35	...	4	12	12	4	2	...	...	2	2	...	...	16	15
Scarlet fever	1	...	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Diphtheria	10	6	7	12	19	16	35	23	5	2	5	...	...	...	...	3	7	...	...	16	9
Measles	1	1	1	...	2	1	3	2	...	...	...	1	...	...	...	1	...	...	...	1	1
Erysipelas	1	1	1	1	4	...	4	...	...	...	1	...	2	...	1	...	...	...	...	4	...
Hooping cough	1	2	1	2	3	3	6	6	...	...	...	...	...	...	...	1	1	...	...	2	2
Rubeola	...	2	...	...	2	...	2	...	...	1	1	...	...	...	...	...	...	...	...	2	...
Malaria	...	1	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Parotitis	...	1	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...
Influenza	...	1	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...
Pyæmia	...	1	...	...	1	...	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...
Septicæmia	...	...	2	...	...	2	2	...	...	...	...	2	...	...	...	...	2	...	...	...	...
Vaccinia	...	...	1	...	...	1	1	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Group B:																					
Poisons:																					
Alcohol	...	4	4	2	10	...	10	...	...	...	2	2	3	...	3	...	...	...	...	10	...
Opium	1	...	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Hydrochloric acid	...	1	...	...	1	...	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...
Carbolic acid	...	2	1	...	2	1	3	3	...	...	...	...	...	...	...	...	...	...	...	2	1
Lead	...	2	2	2	6	...	6	...	...	1	2	1	1	1	...	...	...	...	...	6	...
Turpentine	1	1	...	...	1	1	2	2	...	...	...	...	...	...	...	...	...	...	...	1	1
Paraffin	...	...	1	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...
Belladonna	...	...	...	1	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1	...
Cocaine	...	...	...	1	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Group C:																					
Developmental Diseases:																					
Debility	...	2	3	1	1	5	6	...	...	...	1	4	1	...	...	...	...	...	...	1	5
Marasmus	1	...	3	1	1	4	5	5	...	...	...	...	...	...	...	...	...	...	1	1	3
Group D:																					
Not classified:																					
Syphilis:																					
1. Congenital	1	...	3	2	2	4	6	5	...	1	...	...	...	...	...	2	1	...	...	...	3
2. Acquired	...	3	3	2	4	4	8	...	...	...	4	3	1	...	...	1	...	...	1	3	3
Acute rheumatism	8	2	13	14	28	10	38	1	4	11	12	4	6	1	...	2	...	...	...	26	10
Subacute "	12	12	6	12	14	19	33	...	3	9	14	4	3	...	...	...	...	...	...	15	18
Chronic "	2	1	1	...	4	...	4	...	...	...	...	...	2	2	...	...	...	...	...	4	...
Gout	1	...	2	3	5	1	6	...	...	...	1	2	...	2	1	...	...	...	...	5	1
Osteo-arthritis	2	3	1	6	7	5	12	...	...	1	2	2	3	2	2	...	...	1	...	6	5
Rickets	2	2	...	4	4	4	8	8	...	...	...	...	...	...	...	2	...	1	...	1	4
Anæmia	4	1	6	2	...	13	13	...	...	6	6	...	1	...	...	...	...	...	...	...	13
Pernicious anæmia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	July to Sept.	Oct. to Dec.	Sex. Males.	Sex. Females.	Sex. Total.	Age. Under 5 yrs.	Age. 5—10.	Age. 10—20.	Age. 20—30.	Age. 30—40.	Age. 40—50.	Age. 50—60.	Age. Over 60.	Result. Death. M	Result. Death. F	Result. Unrelieved. M	Result. Unrelieved. F	Result. Relieved. M	Result. Relieved. F
GENERAL DISEASES—*continued*—																					
Splenic anæmia	...	...	1	...	...	1	1	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Leucocythæmia	...	...	1	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Lymphadenoma	...	...	1	...	1	...	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...
Purpura	...	...	...	...	3	1	4	...	1	1	2	...	...	...	...	...	...	...	...	3	1
Tuberculosis	4	7	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
DISEASES OF THE NERVOUS SYSTEM:																					
Brain:																					
Cerebral hæmorrhage	5	2	...	1	5	3	8	...	...	...	...	3	1	1	4	...	...	1	...	4	3
Cerebral softening	...	1	5	2	5	3	8	...	...	1	1	1	2	2	1	2	2	...	...	3	1
Tumour	1	1	...	1	1	2	3	1	...	...	1	...	...	1	...	...	1	1	1	...	...
Hydrocephalus	...	...	2	1	2	1	3	3	...	...	...	...	...	...	...	...	1	1	...	1	...
Meningitis	2	2	...	1	3	2	5	2	2	...	...	...	1	...	...	3	...	...	...	1	1
Tremors of cortical origin	...	2	...	...	2	...	2	...	...	...	...	2	...	...	...	...	...	2	...	...	...
Paralysis agitans	...	...	...	1	...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Cord:																					
Acute myelitis	...	1	...	2	3	...	3	...	...	...	...	1	1	1	...	1	...	...	...	2	...
Chronic myelitis	...	...	1	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1	...
Spinal hæmorrhage	1	...	...	...	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...
Tumour of cord	...	...	...	1	...	1	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...
Anterior poliomyelitis	1	...	...	...	1	...	1	...	...	...	...	...	...	1	...	...	...	1	...	...	...
Tabes	3	1	1	4	8	1	9	...	...	...	1	4	2	2	...	...	...	1	...	7	1
Disseminated sclerosis	1	...	2	...	3	...	3	...	...	...	1	1	1	...	...	...	...	...	...	3	...
Spastic paraplegia	...	...	...	2	1	1	2	...	...	...	...	...	1	1	...	...	...	...	...	1	1
Functional paraplegia	1	2	1	...	...	4	4	...	...	...	...	1	1	1	1	...	...	...	1	...	3
Various:																					
Sciatica	...	...	1	1	2	...	2	...	...	...	...	1	1	...	...	...	...	...	...	2	...
Peripheral neuritis	1	2	1	2	5	1	6	...	...	...	2	2	1	...	2	...	...	...	1	5	...
Alcoholic "	...	...	1	1	...	2	2	...	...	...	...	1	1	...	...	...	...	...	...	...	2
Diphtheritic "	1	1	1	...	2	1	3	2	1	...	...	...	...	...	...	1	1	...	...	1	...
Epilepsy	4	2	...	1	4	3	7	...	1	3	...	2	...	1	...	...	...	...	...	4	3
Convulsions	3	1	...	1	3	2	5	1	...	3	1	...	...	...	...	...	...	1	...	2	2
Chorea	5	5	5	7	6	15	21	...	8	6	1	1	...	...	...	...	...	...	...	5	21
Migraine	1	...	...	...	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Hysteria	3	...	...	1	1	3	4	...	...	1	...	1	2	...	...	...	...	...	1	1	2
Neurasthenia	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Insolation	...	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Mental:																					
Idiocy	1	...	1	3	2	3	5	5	...	...	...	...	...	...	...	1	...	1	2	...	1

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	July to Sept.	Oct. to Dec.	Sex.			Age.							Result.					
					Males.	Females.	Total.	Under 5 yrs.	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved		Relieved.	
																M	F	M	F	M	F
DISEASES OF THE NERVOUS SYSTEM—*cont.:*																					
Mental:																					
General paralysis of the insane	...	...	...	2	2	...	2	...	...	...	...	1	1	...	...	...	...	1	...	1	...
Mania	...	2	...	...	1	1	2	...	...	2	...	...	...	...	...	...	...	...	...	1	1
Hypochondriasis	...	1	...	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...
DISEASES OF THE CIRCULATORY SYSTEM:																					
Dilated heart	1	...	1	2	3	1	4	...	1	...	...	1	1	1	...	...	...	...	...	3	1
Congenital heart	1	...	...	1	1	1	2	...	...	1	...	...	...	1	...	...	...	...	...	1	1
Angina pectoris	1	1	...	...	2	...	2	...	...	...	...	1	1	...	...	...	...	...	...	2	...
Pericarditis	1	1	...	1	3	...	3	1	1	1	...	...	...	...	...	1	...	...	...	2	...
Ulcerative endocarditis	...	2	...	2	2	2	4	1	...	1	...	...	1	1	...	2	...	...	1	...	1
Mitral constriction	6	...	2	4	5	7	12	...	...	2	4	4	1	1	...	...	2	1	...	4	5
„ regurgitation	8	8	9	10	16	19	35	...	3	6	2	7	4	5	2	1	...	...	...	15	19
„ double	3	4	2	3	7	5	12	...	1	2	2	3	3	1	...	1	1	...	...	6	4
Aortic constriction	1	1	1	1	3	1	4	...	...	1	...	1	2	...	...	1	...	...	...	2	1
„ regurgitation	2	1	1	5	7	2	9	...	...	1	2	2	1	2	1	2	...	...	...	5	2
„ double	...	8	4	8	9	11	20	...	...	5	3	7	2	3	...	1	1	...	...	8	10
Arteries:																					
Thoracic aneurism	1	3	3	2	8	...	8	...	...	...	...	6	1	1	...	4	...	1	...	3	...
Arterio-sclerosis	...	1	...	...	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...
Venous thrombosis	...	1	1	1	1	2	3	...	...	1	...	...	1	...	1	...	...	...	...	1	2
DISEASES OF THE RESPIRATORY SYSTEM:																					
Acute laryngitis	..	2	...	1	1	2	3	2	...	...	...	...	1	...	...	...	...	...	...	1	2
Chronic „	1	...	...	...	1	...	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...
Laryngismus stridulus	...	1	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Stenosis of trachea	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis, acute	...	4	2	4	5	5	10	6	...	1	1	...	...	...	...	1	...	...	...	4	5
„ chronic	4	5	5	12	15	11	26	13	1	2	...	6	3	3	4	3	...	...	...	12	11
Bronchiectasis	1	1	...	1	3	...	3	...	...	...	2	...	...	1	...	1	...	...	...	2	...
Pneumonia, lobar	9	10	19	22	43	17	60	20	6	14	9	5	4	2	2	3	3	...	...	40	14
„ lobular	9	7	4	9	14	11	25	28	...	...	...	...	...	...	...	6	7	...	...	8	4
Phthisis	13	8	21	14	39	21	55	...	1	4	20	24	12	2	...	8	6	4	2	27	10
Malignant disease of lung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Emphysema	...	6	1	6	12	1	13	...	...	...	...	5	2	4	2	...	...	1	...	11	1
Pleurisy:																					
Without effusion	2	4	2	8	10	6	16	1	1	2	2	3	5	2	...	...	...	...	...	10	6
With effusion	10	9	8	4	25	6	31	...	5	4	3	9	3	6	1	...	...	...	...	25	6

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	July to Sept.	Oct. to Dec.	Sex.			Age.							Result.					
					Males.	Females.	Total.	Under 5 yrs.	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved.		Relieved.	
																M	F	M	F	M	F
DISEASES OF THE RESPIRATORY SYSTEM: —*cont.*																					
Pyopneumothorax	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Empyema	1	2	1	..	3	1	4	2	...	...	2	...	...	...	...	...	...	...	...	3	1
Asthma	1	...	1	...	...	2	2	...	...	1	1	...	...	...	...	...	...	...	...	...	2
DISEASES OF THE DIGESTIVE SYSTEM.																					
Mouth:																					
Stomatitis	...	1	1	1	...	3	3	2	1	...	...	...	...	...	...	...	...	...	...	...	3
Pharynx and Œsophagus:																					
Adenoids	...	1	...	1	1	1	2	1	1	...	...	...	...	...	...	...	1	...	...	1	...
Tonsillitis	3	3	6	4	9	7	16	3	4	4	4	1	...	...	...	...	1	...	...	9	6
Pharyngitis	1	1	...	1	3	...	3	...	...	...	...	1	2	...	...	...	...	...	...	3	...
Stricture of œsophagus	1	2	2	1	4	2	6	...	...	...	1	1	2	2	...	1	1	1	...	2	1
Stomach:																					
Dyspepsia	4	7	4	1	6	11	17	...	...	2	4	7	2	...	2	...	...	...	...	6	11
Vomiting	...	1	...	...	...	1	1	...	1	...	...	...	...	1	...	...	...	...	...	...	1
Acute gastritis	...	...	2	...	1	1	2	1	...	...	...	...	...	...	...	...	...	...	...	1	1
Ulcer	7	6	7	8	8	20	28	...	...	7	9	5	6	...	1	1	...	...	1	7	19
Dilatation	1	1	1	1	3	1	4	...	...	...	...	...	3	1	...	1	...	...	...	3	...
Intestines:																					
Gastro-enteritis	...	...	11	3	9	5	14	10	1	...	...	2	1	...	...	...	...	...	...	9	5
Diarrhœa	4	1	2	4	6	5	11	8	...	...	1	...	1	1	...	1	3	...	...	5	2
Constipation	1	1	3	4	5	4	9	1	2	4	1	...	1	...	...	...	1	...	...	5	3
Colic	1	...	1	...	2	...	2	...	1	...	...	1	...	...	...	...	...	...	...	2	...
Typhlitis	3	5	9	4	15	6	21	1	7	6	...	2	1	...	...	2	...	...	...	13	6
Enteritis	...	...	7	...	2	5	7	3	...	...	1	2	...	...	1	...	2	...	...	2	3
Chronic dysentery	...	...	3	...	3	...	3	...	...	...	1	...	2	...	...	...	...	...	...	3	...
Lumbrici	1	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Intestinal obstruction	1	...	1	...	2	...	2	...	...	1	1	...	...	...	...	2	...	...	...	...	...
Ulcerative colitis	...	...	3	...	2	1	3	...	...	...	2	1	...	...	...	1	...	...	...	1	1
Rectal hæmorrhage	...	1	1	...	...	2	...	...	...	...	1	...	1	...	...	...	...	...	...	...	2
Liver:																					
Acute yellow atrophy	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...
Enlarged liver	...	2	3	...	1	4	5	...	...	...	...	1	4	...	...	...	...	...	2	1	2
Cirrhosis	2	4	3	2	7	4	11	...	...	...	...	3	5	1	3	...	...	1	...	6	4
Malignant disease	...	3	3	1	4	3	7	...	...	...	...	2	2	2	1	3	1	1	1	...	1
Gall-stones	1	1	...	1	1	2	3	...	...	...	1	1	1	...	...	...	...	..	...	1	2

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	July to Sept.	Oct. to Dec.	Sex.			Age.								Result.					
					Males.	Females.	Total.	Under 5 yrs.	5—10.	10—20.	20—30	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved.		Relieved.	
																M	F	M	F	M	F
DISEASES OF THE DIGESTIVE SYSTEM — *continued* —																					
Liver (continued):																					
Jaundice	3	3	1	1	5	5	8	2	...	1	...	...	3	1	1	...	...	1	...	2	5
Hydatid	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Abscess	...	1	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Peritoneum:																					
Acute peritonitis	...	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Chronic "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tubercular "	2	...	...	...	...	2	...	...	1	...	...	...	1	...	...	...	...	...	...	...	2
Malignant "	...	...	...	2	1	1	2	...	...	...	...	...	...	1	1	1	1	...	...	...	...
Abdominal tumour	...	1	4	...	2	3	...	...	...	...	...	1	1	3	...	...	...	1	1	1	2
DISEASES OF THE THYROID BODY:																					
Exophthalmic goître	...	2	1	2	...	5	5	...	...	2	...	2	...	1	...	...	...	...	1	...	4
Myxœdema	1	...	1	1	...	3	3	...	...	...	...	...	2	1	...	...	...	...	...	...	3
DISEASES OF THE SUPRARENAL CAPSULE:																					
Addison's disease	1	...	...	...	1	...	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...
DISEASES OF THE URINARY SYSTEM:																					
Acute nephritis	2	...	3	3	7	1	8	...	2	3	1	...	2	...	...	...	1	2	...	5	...
Chronic nephritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Large white kidney	5	8	7	4	16	8	24	...	...	2	6	6	4	1	1	3	...	...	...	13	8
Granular contracted kidney	1	4	...	3	3	5	8	...	...	...	2	5	1	4	...	1	5	...	...	2	...
Lardaceous kidney	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sarcoma of "	...	...	1	...	...	1	1	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Tubercle of "	...	1	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Stone in "	1	1	1	...	3	...	3	...	...	...	1	1	1	...	...	...	...	1	...	2	...
Movable "	...	2	1	1	...	4	4	...	...	...	2	1	1	...	...	...	...	...	4	...	...
Cystitis	1	...	1	...	2	...	2	...	...	...	...	...	1	1	...	1	...	...	...	1	...
Diabetes mellitus	1	...	...	3	2	2	4	...	...	...	1	...	...	1	2	2	...	...	...	...	2
Polyuria	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Phosphaturia	...	1	...	...	...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Stone in bladder	1	...	...	...	...	1	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...
Carcinoma of prostate	...	1	...	...	1	...	1	...	...	...	...	...	...	...	1	...	...	1	...	...	...
DISEASES OF THE SKIN:																					
Erythema nodosum	...	...	1	...	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Eczema	...	...	...	1	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Dermatitis exfoliativa	...	...	...	1	...	1	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...

TABLE A—*continued.*

DISEASE.	Jan. to March.	April to June.	July to Sept.	Oct. to Dec.	Sex.			Age.							Result.					
					Males.	Females.	Total.	Under 5 yrs	5—10.	10—20.	20—30.	30—40.	40—50.	50—60.	Over 60.	Death.		Unrelieved.		Relieved.	
																M	F	M	F	M	F
VARIOUS:																					
Nil	5	7	10	1	16	7	23	9	5	3	4	2	...	...	...	...	...	...	...	16	7
Fracture of skull	1	...	...	...	1	...	1	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Stricture of urethra	1	...	...	...	1	...	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...
Pregnancy	...	1	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Autotoxæmia	...	1	...	1	...	2	2	...	...	1	...	...	1	...	...	...	2	...	...	...	...
Debility	...	2	3	1	1	5	6	...	...	...	1	4	1	...	...	...	...	...	...	1	5
Cerebritis	...	1	...	...	1	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Cerebral concussion	...	...	1	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Spinal caries	...	...	1	...	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	1	1
Elephantiasis	...	...	1	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...
Varicose veins	...	...	...	1	...	1	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Obesity	...	...	...	1	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...
Otitis media	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Gangrene	...	...	1	...	1	...	1	...	...	...	...	...	...	1	...	1	...	...	...	...	...

TABLE B.—*List of Deaths in the Medical Wards.*

	Males.		Females.
GENERAL DISEASES:			
Enteric fever	2	...	2
Diphtheria	3	...	7
Measles	1	...	0
Hooping cough	1	...	1
Pyæmia	1	...	0
Septicæmia	0	...	2
Vaccinia	0	...	1
POISONS:			
Hydrochloric acid	1	...	0
NOT CLASSIFIED:			
Congenital syphilis	2	...	1
Acquired „	1	...	0
Acute rheumatism	2	...	0
Rickets	2	...	0
Splenic anæmia	0	...	1
Lymphadenoma	1	...	0
DISEASES OF THE NERVOUS SYSTEM:			
Cerebral softening	2	...	2
„ tumour	0	...	1
Hydrocephalus	0	...	1
Meningitis	3	...	0
Acute myelitis	1	...	0
Tumour of cord	0	...	1
Diphtheritic neuritis	1	...	1
Idiocy	1	...	0
DISEASES OF THE CIRCULATORY SYSTEM:			
Pericarditis	1	...	0
Ulcerative endocarditis	2	...	0
Mitral constriction	0	...	2
„ regurgitation	1	...	0
„ double	1	...	1
Aortic constriction	1	...	0
„ regurgitation	2	...	0
„ double	1	...	1
Thoracic aneurysm	4	...	0
DISEASES OF THE RESPIRATORY SYSTEM:			
Chronic laryngitis	1	...	0
Bronchitis, acute	1	...	0
„ chronic	3	...	0

DISEASES OF THE RESPIRATORY SYSTEM—*continued.*

	Males.		Females.
Bronchiectasis	1	...	0
Pneumonia, lobar	3	...	3
„ lobular	6	...	7
Phthisis	8	...	6

DISEASES OF THE DIGESTIVE SYSTEM:

Adenoids	0	...	1
Tonsillitis	0	...	1
Stricture of œsophagus	1	...	1
Gastric ulcer	1	...	0
„ dilatation	1	...	0
Diarrhœa	1	...	3
Constipation	0	...	1
Typhlitis	2	...	0
Enteritis	0	...	2
Intestinal obstruction	2	...	0
Ulcerative colitis	1	...	0
Acute yellow atrophy	0	...	1
Carcinoma of liver	3	...	1
Malignant peritonitis	1	...	1
Addison's disease	1	...	0

DISEASES OF THE URINARY SYSTEM:

Acute nephritis	0	...	1
Large white kidney	3	...	0
Granular contracted kidney	1	...	5
Sarcoma of kidney	0	...	1
Cystitis	1	...	0
Diabetes mellitus	2	...	0

SKIN:

Dermatitis exfoliativa	0	...	1

VARIOUS:

Fracture of skull	1	...	0
Stricture of urethra	1	...	0
Autotoxæmia	0	...	2
Cerebritis	1	...	0
Gangrene	1	...	0
Total	86	...	63

SURGICAL REGISTRAR'S REPORT FOR THE YEAR ENDING DECEMBER 31ST, 1896.

By E. PERCY PATON, M.S., M.D.

The total number of cases under treatment in the Surgical Wards during the past year was 1,233, viz.:—

	Males.	Females.	Total.
Remaining in Hospital December 31st, 1895...	42	34	76
Admitted during the year 1896	706	451	1,157
			1,233
Of these there were:			
Discharged, cured or relieved	659	435	1,094
Transferred to Medical Wards.....	4	7	11
Died	32	13	45
In Hospital December 31st, 1896.....	53	30	83
			1,233

The percentage of deaths during the year has been 3·91.

TABLE I.—*Statistical tables of Diseases, Injuries, and Operations, with a table of Infectious Diseases admitted into or occurring in the Surgical Wards during* 1896.

DISEASES.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
GENERAL DISEASES:														
Pyæmia	1	1	...	...	...	...	...	1	...	...	...	...	1	Died of pyæmia.
Erysipelas, cellulo-cutaneous	1	1	...	...	...	...	1	...	...	...	...	1	...	
Tetanus	1	1	...	...	...	1	...	...	...	...	...	...	1	A very acute case; died in 36 hours; anti-tetano-toxin used without effect.
Gangrene, senile	2	2	...	...	...	...	...	...	...	...	2	2	...	
" Raynaud's (?)	1	...	1	...	...	...	1	...	...	...	...	1	...	Located to one finger and combined with an obscure erythematous eruption of arm.
Rickets	1	1	...	1	...	...	...	...	...	...	...	1	...	
Parasites, hydatids	1	...	1	...	...	...	1	...	...	...	...	1	...	
VENEREAL DISEASE:														
Syphilis, congenital	3	...	3	...	...	2	...	...	...	1	...	3	...	
" acquired	10	7	3	...	...	...	4	4	1	...	1	9	1	The patient that died developed an empyema connected with bone disease.
Soft chancres	2	2	...	...	...	...	1	...	...	1	...	2	...	
LOCAL DISEASES:														
Tumours:														
Epithelioma of														
Mouth and Jaw	3	3	...	...	...	...	...	1	1	1	...	2	1	Died of pneumonia 5 days after operation.
Tongue	2	2	...	...	...	...	...	...	...	1	1	2	...	
Cheek	2	2	...	...	...	...	...	...	...	1	1	2	...	
Lip	3	3	...	...	...	...	...	...	...	...	3	3	...	

Œsophagus	3	3	...	...	...	...	...	...	1	...	2	2	1	Died of septic cellulitis extending to the pericardium after gastrostomy by Alibert's method.
Scrotum	1	1	...	...	...	...	...	1	...	...	...	1	...	
Penis	1	1	...	...	...	...	...	1	...	...	...	1	...	
Labium majus	1	...	1	...	...	...	...	1	...	...	...	1	...	
Bladder	1	...	1	...	...	...	...	...	1	...	...	1	...	
Vocal cord	1	1	...	...	...	...	...	...	...	...	1	1	...	
Rodent ulcer, face	1	1	...	...	...	...	...	1	...	...	...	1	...	
Carcinoma:														
Breast	21	...	21	...	...	...	...	2	3	11	5	20	1	No operation was done on the case that died, and one case refused operation.
Breast (recurrent)	4	...	4	...	...	...	...	...	2	...	2	3	1	No operation was done on the case that died.
Lymphatic glands (neck)	2	2	...	...	...	...	1	...	1	...	...	2	...	
Pharynx	1	1	...	...	...	...	...	...	...	...	1	1	...	
Pylorus	1	1	...	...	...	...	...	...	1	...	...	1	...	
Cæcum	1	1	...	...	...	...	...	...	...	1	...	1	...	
Rectum	3	1	2	...	...	...	...	...	2	1	...	3	...	
Liver	1	1	...	...	...	...	...	...	1	...	...	1	...	
Sarcoma:														
Scalp (recurrent)	1	...	1	...	...	1	...	...	...	...	1	1	...	
Superior maxilla	1	1	...	...	...	...	...	...	...	1	...	1	...	
Axillary glands	1	...	1	...	...	...	...	...	...	1	...	1	...	
Cervical "	2	1	1	...	...	...	1	...	...	1	...	2	...	
Scapula	1	1	...	...	...	...	1	...	...	...	...	1	...	
Ilium	2	2	...	...	...	...	...	...	2	...	...	1	1	Died of recurrence; with exhaustion.
Femur	3	2	1	...	...	2	1	...	...	...	...	3	...	
" recurrent	1	1	...	...	...	1	...	...	...	...	...	...	1	Died of exhaustion.
Heel	1	1	...	...	...	...	...	...	1	...	...	1	...	
Toe	1	...	1	...	...	1	...	...	...	...	...	1	...	
Kidney	1	...	1	...	1	...	...	...	...	...	...	1	...	Was removed by abdominal nephrectomy; but recurred.
Cysts:														
Dermoid	6	4	2	1	...	1	4	...	...	...	...	6	...	

TABLE I.—*continued.*

DISEASES.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
LOCAL DISEASES—*continued*—														
Cysts—(*contd.*)														
Sebaceous	2	1	1	1	...	...	1	...	...	...	...	2	...	
Serous	2	2	...	...	...	1	...	1	...	...	...	2	...	1 of these was a very large Baker's cyst of knee joint; the other of doubtful origin.
Ovarian	1	...	1	...	...	...	...	1	...	...	...	1	...	
Adeno-fibroma of breast	4	...	4	...	...	...	4	...	...	...	...	4	...	
Myxo-adeno-fibroma of breast	1	...	1	...	...	...	...	...	1	...	...	1	...	
Fibroma of chin	1	1	...	...	...	...	...	...	1	...	...	1	...	
Enchondroma of septum nasi	1	1	...	...	...	...	1	...	...	...	...	1	...	
Exostosis of phalanx of toe	1	...	1	...	...	...	...	...	1	...	...	1	...	
" tibia	1	1	...	...	...	1	...	...	...	...	...	1	...	
Lipoma of mastoid	1	1	...	...	...	...	...	...	1	...	...	1	...	
" back	6	...	6	1	...	...	...	1	1	2	1	6	...	
" shoulder	3	...	3	...	...	1	...	...	2	...	...	3	...	
" subperitoneal	1	...	1	...	...	1	...	...	...	...	...	1	...	
Nævus	10	1	9	9	...	1	...	...	...	...	...	10	...	
Papilloma of foot	1	...	1	...	...	...	1	...	...	...	...	1	...	
" prepuce	2	2	...	...	...	...	2	...	...	...	...	2	...	
Granuloma of ulcer of leg	1	...	1	...	...	...	...	...	1	...	...	1	...	A large mass in connection with an old chronic ulcer.
MALFORMATIONS AND DEFORMITIES:														
Cleft palate	3	1	2	2	1	...	...	...	...	...	...	3	...	
Hare lip	4	4	...	4	...	...	...	...	...	...	...	4	...	

Torticollis	1	...	1	...	...	1	...	...	...	...	...	1	...
Contracted finger	1	...	1	...	...	...	1	...	...	...	...	1	...
Webbed fingers	1	1	...	...	1	...	...	...	...	...	...	1	...
Dupuytren's contraction	2	2	...	...	...	...	...	1	...	1	...	2	...
Hammer toe	3	2	1	...	...	2	1	...	...	...	...	3	...
Contracted toe	1	1	...	...	...	...	...	1	...	...	...	1	...
Hallux valgus	5	2	3	...	...	2	...	1	2	...	...	5	...
Flat foot	4	2	2	...	...	3	1	...	...	...	...	4	...
Talipes :													
Plantaris	2	2	...	...	...	2	...	...	...	...	...	2	...
Calcareous	2	2	...	2	...	...	...	...	...	...	...	2	...
Varus	4	1	3	2	2	...	...	...	...	...	...	4	...
Equinus	3	2	1	1	...	1	...	1	...	...	...	3	...
Equino-varus	6	6	...	3	3	...	...	...	...	...	...	6	...
Pes cavus	2	1	1	...	...	1	1	...	...	...	...	2	...
Lobster claw deformity on feet and hands	1	...	1	...	1	...	...	...	...	...	...	1	...
Genu valgum	4	4	...	3	...	...	1	...	...	...	...	4	...
Bow-legs	2	...	2	2	...	...	...	...	...	...	...	2	...
Congenital deformity of legs	1	...	1	...	1	...	...	...	...	...	...	1	...
Lateral curvature of spine	4	...	4	2	...	2	...	...	...	...	...	4	...
DISEASES OF THE NERVOUS SYSTEM :													
Cephalalgia (chronic)	1	...	1	...	...	...	1	...	...	...	...	1	...
Neuralgia (ulnar nerve)	1	...	1	...	...	1	...	...	...	...	...	1	...
Sciatica	4	3	1	...	...	...	2	1	1	...	...	4	...
Infantile palsy	1	...	1	1	...	...	...	...	...	...	...	1	...
DISEASES OF THE EYE :													
Leucoma	2	1	1	...	...	...	2	...	...	...	...	2	...
Keratitis	2	1	1	...	...	...	1	1	...	...	...	2	...
Iritis	2	1	1	...	...	...	1	1	...	...	...	2	...

TABLE I.—*continued.*

DISEASES.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	–5	–10	–20	–30	–40	–50	–60	+60	R.	D.	
DISEASES OF THE EYE—*contd.*—														
Conjunctivitis	1	1	...	1	...	...	...	...	...	...	...	1	...	
Cataract	6	4	2	...	...	1	1	...	...	...	4	6	...	
Glaucoma	3	...	3	...	...	...	...	...	...	1	2	3	...	
Shrunken globe	1	1	...	...	...	...	1	...	...	...	...	1	...	
Panophthalmitis	1	...	1	1	...	...	...	...	...	...	...	1	...	
Detached retina	1	1	...	...	...	...	...	1	...	...	...	1	...	
DISEASES OF THE EAR:														
Suppurative otitis media	8	1	7	1	1	2	3	...	1	...	...	8	...	
Polypus	1	1	...	...	...	1	...	...	...	...	...	1	...	
Cholesteatoma	1	1	...	...	...	1	...	...	...	...	...	1	...	
DISEASES OF THE NOSE:														
Hypertrophied turbinals	6	1	5	...	...	4	1	1	...	...	...	6	...	
Deviated septum	1	...	1	...	...	...	1	...	...	...	...	1	...	
Polypi	1	1	...	...	...	...	...	...	...	...	1	1	...	
Empyema frontal sinus	1	...	1	...	...	...	...	1	...	...	...	1	...	
Epistaxis	1	...	1	...	...	...	...	1	...	...	...	1	...	
DISEASES OF PHARYNX AND LARYNX:														
Enlarged tonsils	4	3	1	...	...	3	1	...	...	...	...	4	...	
Inflammatory swelling of soft palate	1	...	1	...	...	1	...	...	...	...	...	1	...	
Tonsillitis	1	...	1	...	...	1	...	...	...	...	...	1	...	
Adenoids	30	10	20	4	11	12	3	...	...	...	...	30	...	

DISEASES OF THE THYROID:														
Cyst of	1	...	1	...	...	...	...	1	...	...	...	1	...	
Thyro-glossal cyst	1	...	1	1	...	...	...	...	...	...	...	1	...	The cyst had suppurated but had not opened.
DISEASES OF CHEST:														
Empyema	4	2	2	2	...	...	1	1	...	...	...	1	3	
DISEASES OF THE VASCULAR SYSTEM:														
Veins:														
Varicose	39	16	23	...	...	2	13	10	9	5	...	39	...	
Varicocele	13	13	...	...	...	8	4	1	...	...	...	13	...	
Thrombosis	7	2	5	...	...	...	...	4	...	3	...	7	...	
Aneurysm, popliteal	1	1	...	...	...	...	...	...	1	...	...	1	...	Cured spontaneously in a few days by extension of the limb.
DISEASES OF LYMPHATIC SYSTEM:														
Enlarged glands	9	5	4	...	1	1	5	1	1	...	...	9	...	
Inflamed "	6	4	2	2	1	...	1	1	...	1	...	6	...	
Tubercular "	18	3	15	1	...	12	3	1	1	...	...	18	...	
DISEASES OF DIGESTIVE SYSTEM:														
Mouth:														
Ulcerative stomatitis	1	...	1	...	1	...	...	...	...	...	...	1	...	
Œsophagus:														
Foreign body in	1	1	...	...	...	...	...	1	...	...	...	...	1	Died of septic suppuration after œsophagotomy.
Stomach:														
Ruptured perforating ulcer	2	1	1	...	...	...	...	...	2	...	...	...	2	Both died of general peritonitis. On one laparotomy was done without finding the ulcer.

TABLE I.—*continued.*

DISEASES.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
DISEASES OF DIGESTIVE SYSTEM—*contd.*														
Liver:														
Gall-stones	2	...	2	...	...	...	...	...	...	1	1	2	...	
Old abscess	1	1	...	...	...	...	...	...	...	...	1	1	...	
Abdominal pain	1	1	...	...	...	...	...	1	...	...	...	1	...	
Intestines:														
Hernia:														
Reducible, inguinal	36	34	2	9	2	4	13	6	1	...	1	36	...	
" femoral	1	...	1	...	...	...	...	...	1	...	...	1	...	
" umbilical	2	...	2	...	...	...	...	...	...	2	...	2	...	
Irreducible, inguinal	2	2	...	...	...	...	...	1	1	...	...	2	...	
" femoral	1	...	1	...	...	...	...	...	1	...	...	1	...	
" ventral	1	...	1	...	...	...	...	...	...	1	...	1	...	
Strangulated, inguinal	7	6	1	3	...	...	1	...	2	...	1	7	...	
" femoral	3	...	3	...	...	...	...	1	1	1	...	3	...	
Intestinal obstruction	5	4	1	...	...	...	1	1	...	...	2	1	4	Died of the obstruction either after or without operation.
Intussusception	1	...	1	1	...	...	...	...	...	...	...	...	1	
Perityphlitis and appendicitis	4	3	1	...	...	4	...	...	...	...	...	4	...	
Peritonitis	3	2	1	1	1	...	1	...	...	...	...	1	2	Of the deaths 1 was after laparotomy for tubercular disease, and the other was an acute purulent case from micro-organisms and was not operated on.
Rectum and Anus:														
Hæmorrhoids	30	20	10	...	...	...	5	10	8	7	...	30	...	

Stricture (fibrous)	3	1	2	...	...	1	1	...	...	1	...	3	...	1 was a stricture after excision.
Fissure	3	2	1	...	...	1	...	...	2	...	...	3	...	
Foreign body	1	1	...	...	...	...	...	...	1	...	...	1	...	
Fistula in ano	15	11	4	...	1	1	2	4	1	6	...	15	...	
DISEASES OF THE GENITO-URINARY ORGANS:														
Kidney:														
Pyonephrosis	2	2	...	...	...	...	...	1	1	...	...	2	...	In the case that died the stone was impacted in the ureter, the kidney was explored, and the patient died of uræmia.
Calculus	8	8	...	...	...	2	1	3	2	...	...	7	1	In all these cases it was doubtful if a calculus was really present; the diagnosis was provisional.
Movable	1	...	1	...	...	...	...	...	1	...	...	1	...	
Bladder:														
Stone	3	2	1	...	...	...	...	...	3	...	...	2	1	Died of cystitis and exhaustion after lithotrity.
Cystitis	1	1	...	...	...	...	...	...	...	...	1	...	1	
Irritability	2	2	...	...	...	1	...	...	1	...	...	2	...	
Urethra:														
Stricture	27	27	...	...	...	...	2	8	6	7	4	24	3	1 case died of pulmonary embolism, in 1 the cause was doubtful, and 1 died of exhaustion after Cock's operation.
Prostate:														
Enlarged	10	10	...	...	...	...	...	...	...	4	6	7	3	1 had retention and died of uræmia, the other 2 died of cystitis and exhaustion.
Pyuria	1	1	...	...	...	...	...	1	...	...	...	1	...	
Nocturnal incontinence	1	1	...	...	...	1	...	...	...	...	...	1	...	
Penis:														
Phimosis	13	13	...	1	2	4	4	...	1	1	...	13	...	
Paraphimosis	4	4	...	...	1	3	...	...	...	...	...	4	...	
Hypospadias	1	1	...	1	...	...	...	...	...	...	...	1	...	

TABLE I.—*continued.*

DISEASES.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
DISEASES OF THE GENITO-URINARY ORGANS—*contd.*														
Cord:														
Encysted hydrocele	2	2	...	2	...	...	...	...	...	...	...	2	...	
Tunica vaginalis:														
Hydrocele	5	5	...	...	...	...	1	1	1	1	1	5	...	
Testis:														
Neuralgia	1	1	...	...	...	...	...	...	1	...	...	1	...	
Tubercular disease	1	1	...	...	...	...	1	...	...	...	...	1	...	
Epididymitis	2	2	...	...	...	1	1	...	...	...	...	2	...	
Ruptured perinæum	1	...	1	...	...	...	...	...	1	...	...	1	...	
Breast:														
Chronic mastitis	4	...	4	...	...	...	1	1	1	1	...	4	...	
Neuralgia	2	...	2	...	...	1	...	...	1	...	...	2	...	
DISEASES OF THE ORGANS OF LOCOMOTION:														
Bone, Diseases of:														
Periostitis and ostitis:														
Lower jaw	1	1	...	...	...	1	...	...	...	...	...	1	...	
Humerus	1	...	1	...	...	1	...	...	...	...	...	1	...	
Radius	1	...	1	...	1	...	...	...	...	...	...	1	...	
Femur	1	1	...	...	...	1	...	...	...	...	...	1	...	

Tibia	5		5		...	1	4				5	
Fibula	1				...	...				1	1	
Metatarsal bone	1	1			...	1					1	
Caries and necrosis:												
Jaw					...	...					1	
Temporal bone					...	1					...	1 Died of cerebral inflammation.
Spine	2	7	5	3	2	4	3				12	
Ilium					...	...					1	
Femur		1			...	...					1	
Tibia	2		2		...	2					2	
Fibula	1				...	...				1	1	
Tarsus	2				1	...		1			2	
Metatarsus		1			...	1					1	
Carpus	1				...	...					1	
Phalanx	2	2			...	...					2	
Infective osteomyelitis	1		1		...	1					...	1 Died after amputation of thigh.
Abscess in bone	3	2		1	...	1					3	
Morton's disease	1				...	1					1	
DISEASES OF JOINTS:—												
Ankylosis:												
Shoulder			1		...	...			1		1	
Elbow			1		...	...	1				1	
Wrist			1		...	...					1	
Knee	2	1	1		...	...	1				2	
Synovitis:												
Elbow	2	1	1		1	...		1			2	
Knee	18	12	6		...	3	7	4	2	2	18	
Ankle	4	3			...	1	1		2		4	
Tubercle:												
Elbow	5	4	1	1	3	...				1	5	

Table I.—*continued.*

Diseases.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
Diseases of Joints:														
Tubercle—contd.														
Carpal joints	1	1	...	...	...	1	...	...	...	...	...	1	...	
Hip	18	9	9	...	8	7	1	2	...	...	...	18	...	
Knee	9	5	4	...	3	1	4	1	...	...	...	9	...	
Ankle	2	...	2	...	...	2	...	...	...	...	...	2	...	
Suppurative arthritis ankle	1	1	...	...	...	1	...	...	...	...	...	1	...	
Gonorrhœal arthritis	1	1	...	...	...	1	...	...	...	...	...	1	...	
Osteo-arthritis, hip	1	1	...	...	...	...	...	...	...	1	...	1	...	
" knee	3	2	1	...	...	...	...	1	1	...	1	3	...	
Functional disease, hip	1	...	1	...	...	1	...	...	...	...	...	1	...	
Diseases of Stumps:														
Sinuses	4	2	2	...	...	1	...	2	1	...	...	4	...	
Diseases of Bursæ, Fasciæ, and Tendons:														
Enlarged bursæ	16	8	8	...	...	4	6	2	2	2	...	16	...	
Suppurating bursæ	10	5	5	...	...	5	1	1	...	1	2	10	...	
Ganglion, simple	9	5	4	1	2	6	...	...	...	...	...	9	...	
" compound palmar	1	1	...	...	...	1	...	...	...	...	...	1	...	
Tubercular teno-synovitis	1	1	...	...	...	...	1	...	...	...	...	1	...	

DISEASES OF CELLULAR TISSUE—INFLAMMATION AND SUPPURATION:														
Abscesses:														
Of head and neck	55	29	26	17	7	10	8	5	3	4	1	53	2	1 mastoid case died of meningitis, and 1 abscess of neck of septic broncho-pneumonia.
Of upper extremity	23	8	15	7	5	4	2	3	1	1	...	23	...	
Of lower extremity	13	6	7	3	3	4	1	2	...	...	...	13	...	
Ischio-rectal and anal	15	11	4	...	2	2	4	3	4	...	...	15	...	
Of perinæum and groin	18	14	4	...	3	2	4	5	1	2	1	18	...	
Pericæcal	3	...	3	...	...	1	1	...	...	1	...	3	...	
Psoas	4	1	3	...	2	...	...	...	2	...	...	2	2	1 died of exhaustion, 1 of tubercular meningitis.
Mammary	7	...	7	...	...	...	4	2	1	...	...	7	...	
Cellulitis	10	7	3	1	1	...	6	...	2	...	...	10	...	
DISEASES OF CUTANEOUS SYSTEM:														
Ulcers	15	11	4	1	...	2	1	...	7	4	...	15	...	
Lupus	6	3	3	...	2	4	...	...	...	...	...	6	...	
Whitlow	5	2	3	1	...	2	...	1	1	...	...	5	...	
Carbuncle:														
Neck	1	1	...	...	...	...	...	1	...	...	...	1	...	
Buttock	1	1	...	...	1	...	...	...	...	...	...	1	...	
Suppurating corn	2	1	1	...	...	...	1	1	...	...	...	2	...	
Ingrowing toe-nail	2	2	...	...	...	1	1	...	...	...	...	2	...	
Cutaneous tubercle	1	...	1	...	...	...	1	...	...	...	...	1	...	
Psoriasis	1	1	...	...	...	...	1	...	...	...	...	1	...	
Eczema	2	2	...	2	...	...	...	...	...	...	...	2	...	
Dermatitis herpetiformis	1	...	1	...	...	...	1	...	...	...	...	1	...	
Sinuses	17	12	5	1	2	3	2	2	4	2	1	17	...	
Œdema of leg	1	...	1	...	...	...	1	...	...	...	...	1	...	

TABLE I.—*continued.*

DISEASES.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
UNCLASSIFIED:														
(?) Trophic nerve interference, arm.	1	1	...	...	...	...	1	...	...	...	...	1	...	
Colic	1	1	...	...	...	...	...	...	...	...	1	1	...	
Coccydinia	2	...	2	...	...	2	...	...	...	...	...	2	...	
Parotitis	1	1	...	...	1	...	...	...	...	...	...	1	...	
Attempted suicide	3	3	...	...	...	1	...	...	...	2	...	3	...	
Neuromimesis	8	4	4	...	1	2	2	1	1	...	1	8	...	
Carious teeth	1	...	1	...	...	...	1	...	...	...	...	1	...	

Table II.

General Injuries.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
General Injuries:														
Burns	4	2	2	3	...	...	1	...	...	...	...	4	...	
Scalds	5	...	5	3	...	...	1	...	1	...	...	5	...	
Local Injuries:														
Injuries of head and face:														
Wounds	18	14	4	...	1	2	4	1	3	2	5	18	...	
Contusions	3	3	...	2	...	1	...	...	...	...	...	3	...	
Wounds of globe of eye	4	4	...	...	...	2	2	...	...	...	...	4	...	
Concussion	21	15	6	2	1	3	6	3	3	1	...	21	...	
Cerebral compression	1	1	...	...	...	...	1	...	...	...	...	1	...	
Fractures:														
Base of skull	2	2	...	...	...	...	...	...	2	...	...	2	...	
Lower jaw	4	4	...	...	...	1	2	1	...	...	...	4	...	
Injuries of neck:														
Cut throat	1	1	...	...	...	...	...	...	1	...	...	1	...	
Injuries of the thorax:														
Wound of heart and pericardium	1	1	...	...	...	...	...	1	...	...	...	...	1	
Fractured ribs	10	9	1	...	...	...	1	2	3	2	2	10	...	
Injuries of back:														
Concussion of spine	2	2	...	...	...	1	1	...	...	...	...	2	...	
Blow on spine	1	1	...	...	...	1	...	...	...	...	...	1	...	
Fracture-dislocation of spine	1	1	...	...	...	...	...	1	...	...	...	1	...	

TABLE II.—*continued.*

GENERAL INJURIES.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
LOCAL INJURIES—*contd.*														
Injuries of pelvis and genital organs:														
Wound of scrotum	1	1	...	...	1	...	...	...	...	...	...	...	1	Died ten minutes after cessation of chloroform administration given for suture of wound.
Wound of perinæum	1	1	...	...	...	1	...	...	...	...	...	1	...	
Injuries of upper extremity:														
Wounds, lacerated	19	16	3	3	...	4	7	3	2	...	...	19	...	
" gunshot	1	1	...	...	...	1	...	...	...	...	...	1	...	
Foreign bodies in	1	...	1	...	...	...	...	1	...	...	...	1	...	
Fractures:														
Simple:														
Clavicle	3	3	...	...	1	...	1	1	...	...	...	3	...	
Humerus	2	1	1	...	2	...	...	...	...	...	...	2	...	
Radius	1	1	...	...	1	...	...	...	...	...	...	1	...	
Ulna	2	2	...	...	1	...	...	...	...	1	...	2	...	
Compound:														
Clavicle	1	1	...	...	...	...	1	...	...	...	...	1	...	
Humerus	1	1	...	...	1	...	...	...	...	...	...	1	...	
Dislocations:														
Elbow	1	1	...	...	...	1	...	...	...	...	...	1	...	
Head of radius	1	1	...	...	...	...	...	...	...	1	...	1	...	

INJURIES OF LOWER EXTREMITY:														
Wounds:														
Lacerated	7	6	1	...	...	4	2	1	...	...	...	7	...	
Into ankle joint	1	1	...	...	...	...	...	...	1	...	...	1	...	
Contusions	8	8	...	...	2	2	1	1	...	...	2	8	...	
Sprained ankle	6	4	2	...	...	1	...	1	3	...	1	6	...	
Fractures:														
Simple:														
Femur	14	9	5	1	4	...	1	2	...	2	4	11	3	1 died of thoracic aneurysm, 1 of hypostatic pneumonia, and 1 had extensive subpl ural and sub-peritoneal ecchymoses.
Patella	2	1	...	...	...	...	1	1	...	...	...	2	...	
Tibia and fibula	13	9	4	...	2	...	1	2	3	2	3	13	...	
Tibia	7	6	1	...	1	1	1	1	...	3	...	6	1	Died of aortic aneurysm.
Fibula	10	10	...	...	2	1	1	3	3	...	...	10	...	
Pott's	3	2	1	...	...	...	...	...	...	1	2	2	1	Died of pulmonary embolism come from a plugged vein about the fracture.
Compound:														
Tibia	1	1	...	...	...	...	...	...	1	...	...	1	...	
Tibia and fibula	4	4	...	...	...	...	...	1	1	2	...	3	1	Died of pyæmia and meningitis.
Ununited:														
Tibia	4	3	1	...	...	...	...	3	...	1	...	4	...	

Table III.

Operations.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
Removal of Tumours:														
Carcinoma:														
Glands of neck	2	2	...	...	...	...	1	...	1	...	...	2	...	In 1 only part of the glands were removed and the primary seat was doubtful.
Breast (primary)	17	...	17	...	...	...	...	1	3	9	4	17	...	
,, (recurrent)	3	...	3	...	...	..	...	...	2	...	1	3	...	
Epithelioma:														
Face	3	3	...	...	...	...	...	1	...	1	1	3	...	
Tongue	2	2	...	...	...	...	...	...	...	1	1	2	...	
Mouth and tongue	1	1	...	...	...	...	...	...	...	...	1	...	1	
Vocal cord	1	1	...	...	...	...	...	...	...	...	1	1	...	Was removed by thyrotomy with success.
Lip	3	3	...	...	...	...	...	...	...	...	3	3	...	
Scrotum	1	1	...	...	...	...	...	1	...	...	...	1	...	
Labium majus	1	...	1	...	...	...	...	1	...	...	...	1	...	
Sarcoma:														
Scalp (recurrent)	1	...	1	...	...	1	...	...	...	...	...	1	...	
Neck	2	1	1	...	...	...	1	...	...	1	...	2	...	
Scapula	1	1	...	...	...	...	...	1	...	...	...	1	...	
Superior maxilla	1	1	...	...	...	...	...	...	...	1	...	1	...	
Ilium	2	2	...	...	...	...	...	...	2	...	...	2	...	
Skin of heel	1	1	...	...	...	...	...	...	1	...	...	1	...	
Adeno-fibroma of breast	4	...	4	...	...	...	3	...	1	...	...	4	...	
Exostosis	2	...	2	...	...	1	...	...	1	...	...	2	...	
Enchondroma septum nasi	1	1	...	...	...	...	1	...	...	...	...	1	...	

Fibroma of chin	1	1	...	...	...	...	...	...	1	...	...	1	...	
Lipoma	11	2	9	1	...	2	...	1	4	2	1	11	...	
Papillomata	3	2	1	...	...	...	3	...	...	...	...	3	...	
Cysts:														
Dermoid	4	3	1	1	...	1	2	...	...	...	...	4	...	
Sebaceous	2	1	1	...	...	...	2	...	...	...	...	2	...	
Serous	3	3	...	...	...	1	...	2	...	...	...	3	...	
Nævus	9	2	7	9	...	...	...	...	...	...	...	9	...	
Opening abscesses, acute and chronic	153	83	70	30	21	34	30	16	13	6	3	150	3	Cause of death see Table I.
Operations on Nerves:														
Stretching	3	1	2	...	...	2	...	1	...	...	...	3	...	
Operations on the Eye:														
Excision of globe	3	2	1	1	...	...	2	...	...	...	...	3	...	
Iridectomy	3	1	2	...	...	...	1	...	...	1	1	3	...	
Cataract extraction	4	2	2	...	...	...	...	...	...	...	4	4	...	
Cataract needling	2	2	...	...	...	1	1	...	...	...	...	2	...	
Tattooing cornea	1	...	1	...	...	...	1	...	...	...	...	1	...	
Cauterisation of ulcer	1	...	1	...	...	...	...	1	...	...	...	1	...	
Operations on the Ear:														
Scraping	2	2	...	...	...	1	1	...	...	...	...	2	...	
Polypus removal	1	1	...	...	...	...	...	...	...	...	1	1	...	
Operations on the Nose:														
Turbinectomy	5	1	4	...	...	2	2	1	...	...	...	5	...	
Straightening septum	1	...	1	...	...	...	1	...	...	...	...	1	...	

TABLE III.—*continued.*

OPERATIONS.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
OPERATIONS ON PHARYNX, LARYNX, AND ŒSOPHAGUS:														
Tonsillotomy	3	2	1	...	...	3	...	...	...	...	...	3	...	
Adenoids	29	10	19	3	13	9	4	...	...	...	...	29	...	
Œsophagotomy	1	1	...	...	...	...	...	...	1	...	...	...	1	
Opening frontal sinus	1	...	1	...	...	...	...	1	...	...	...	1	...	
OPERATIONS ON HEAD AND FACE:														
Harelip	5	5	...	4	1	...	...	...	...	...	...	5	...	
Cleft palate	4	1	3	2	1	...	...	1	...	...	...	4	...	
Trephining	2	1	1	...	...	...	1	1	...	...	...	1	1	
OPERATIONS ON THYROID GLAND:														
Pustulating cyst	1	...	1	...	...	...	...	...	1	...	...	1	...	
OPERATIONS ON VEINS:														
Varicose veins	33	15	18	...	...	1	13	9	6	4	...	33	...	
Varicocele	12	12	...	...	...	7	4	1	...	...	...	12	...	
OPERATIONS ON THE CHEST:														
Exploration of wound	1	1	...	...	...	...	1	...	...	...	...	1	...	
Opening empyema	2	2	2	2	...	...	1	1	...	...	...	1	3	1 case died of suppurating hydatids, 1 of general tubercle, and 1 with double empyema and bronchitis.
Hydatid of pleura	1	...	1	...	...	...	1	...	...	...	...	1	...	The cyst was easily enucleated and all went well.

Operations on the Abdomen:														
Laparotomy:														
Obstruction	5	5	...	1	...	...	1	1	1	1	...	3	2	1 case of strangulation by a band recovered.
Perforating gastric ulcer	1	...	1	...	...	...	...	...	1	...	...	...	1	Died of peritonitis.
Cholecystotomy	2	1	1	...	...	...	...	...	1	...	1	2	...	
Gastrostomy	1	1	...	...	..	...	...	...	...	...	1	...	1	Died of septic cellulitis.
Excision of vermiform appendix:														
Inguinal colotomy	1	...	1	...	...	...	...	...	1	...	...	1	...	
Strangulated Hernia:														
Inguinal	7	6	1	3	...	...	1	...	2	...	1	7	...	
Femoral	3	...	3	...	...	...	...	1	1	1	...	3	...	
Radical Cure of Hernia:														
Inguinal	31	30	1	4	4	3	12	5	3	...	...	31	...	
Femoral	2	...	2	...	...	...	...	...	2	...	...	2	...	
Umbilical	1	...	...	...	...	...	...	...	...	1	...	1	...	
Operation on Rectum and Anus:														
Piles	28	19	9	...	...	...	4	9	11	4	...	28	...	
Fistula in ano	14	11	3	...	1	1	2	4	3	3	...	14	...	
Stretching of sphincter	4	2	2	...	...	1	1	...	2	...	...	4	...	
Exploration of rectum	1	...	1	...	...	...	...	...	1	...	...	1	...	
Operations on Crurogenital Organs:														
Stricture:														
External urethrotomy	1	1	...	...	...	...	1	...	...	...	...	1	...	
Wheelhouse's operation	5	5	...	...	...	...	...	...	1	4	...	5	...	
Cock's operation	1	1	...	...	...	...	...	...	...	1	...	...	1	Of exhaustion.

TABLE III.—*continued.*

OPERATIONS.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
OPERATIONS ON CRUROGENITAL ORGANS—*cont.*														
Stricture—*contd.*														
Internal urethrotomy	3	3	...	...	...	...	2	1	...	...	...	3	...	
Dilatation	2	2	...	...	...	...	...	...	1	1	...	2	...	
Stone:														
Lithotomy	1	1	...	...	...	...	...	...	1	...	...	...	1	Died of cystitis and uræmia.
Lithotrity	2	1	1	...	...	...	...	...	2	...	...	2	...	
Kidney:														
Exploration of	1	1	...	...	...	...	...	1	...	...	...	...	1	Died of uræmia, stone was impacted in the ureter.
Nephrectomy	1	1	...	...	...	...	...	1	...	...	...	1	...	For drainage.
Nephrorraphy	1	...	1	...	...	...	...	...	1	...	...	1	...	
Abdominal nephrectomy	1	...	1	...	1	...	...	...	...	...	...	1	...	For sarcoma.
Circumcision	21	21	...	4	3	8	3	...	1	2	...	21	...	
Hydrocele	4	4	...	1	...	...	1	1	...	1	...	4	...	
Castration	1	1	...	...	...	...	...	...	...	...	1	1	...	
Ovariotomy	1	...	1	...	...	...	...	1	...	...	...	1	...	
Perinorraphy	1	...	1	...	...	...	...	...	...	1	...	1	...	
OPERATIONS ON BONES:														
Scraping and gouging	7	6	1	1	2	...	2	...	...	2	..	7	...	
Opening abscess in	1	1	1	1	...	...	1	...	...	...	...	2	...	
Resection of rib	1	...	1	...	...	...	...	1	...	...	...	1	...	

Osteotomy	6	4	2	5			1				6	...	
Sequestrotomy	5	3	2	...		3			1		5	...	
Drilling	2	1	1	...			2				2	...	
Gouging mastoid antrum	5	2	3	2	1	2					5	...	
Wiring patella	1	1		...							1	...	
Wiring lower jaw	1	1		...								...	
Excision of coccyx	1		1	...		1					1	...	
Operations on Joints:													
Excision and arthrectomy—													
Knee	5	3	2	...		1	2			1	5	...	
Hip	3	1	2	...	3						3	...	
Metatarso-phalangeal	3	1	2	...			1	1	1		3	...	
Wrist	1	1		...		1					1	...	
Elbow	4	2	2	1	2						4	...	
Wrenching:													
Old fracture				...							1	...	
Shoulder			1	...					1		1	...	
Wrist	1			...				1			1	...	
Hip	1	1		1							1	...	
Knee	1		1	...			1				1	...	
Ankle	2	1	1	...					1		2	...	
Flat foot, &c.	6	3	3	...		2	2	1			6	...	
Reduction of dislocated elbow		1		...							1	...	
Amputations:													
Hand	2	2		1			1				2	...	
Thumb	2			1			1				2	...	
Finger	1	8	3	3		2	3	2			1	...	
Through hip-joint	2	2		...		2					2	...	
Thigh	4	2	2	...		1	1	1			3	1	The case that died was one of acute necrosis.
Through knee-joint	1	1		...		1						...	

TABLE III.—*continued.*

OPERATIONS.	Total.	Sex.		Age.								Result.		Remarks.
		M.	F.	—5	—10	—20	—30	—40	—50	—60	+60	R.	D.	
AMPUTATIONS—*contd.*														
Leg	1	1	...	...	...	...	...	1	...	...	...	1	...	
Syme	2	1	1	...	...	1	...	1	...	...	...	2	...	
Toe	7	4	3	...	...	5	1	...	1	...	...	7	...	
Penis	1	1	...	...	...	...	...	...	...	...	1	1	...	
Fore-quarter	1	1	...	...	...	...	...	1	...	...	...	1	...	For a large chondro-sarcoma of the scapula.
OPERATIONS ON TUBERCULAR GLANDS:														
Scraping	7	2	5	2	...	4	...	...	1	...	...	7	...	
Excision	13	3	10	1	...	6	4	1	1	...	...	13	...	
OPERATIONS ON MUSCLES, TENDONS, AND BURSÆ:—														
Tenotomy	18	10	8	6	4	5	...	...	...	2	...	18	...	
Suture of tendons	2	2	...	...	...	1	...	1	...	...	...	2	...	
Phelp's operation	1	1	...	...	1	...	...	...	...	...	...	1	...	
Division of fascia	3	3	...	...	...	1	1	1	...	...	...	3	...	
Excision of bursa	15	9	6	...	1	3	5	1	3	2	...	15	...	
Excision of ganglia	9	3	6	1	1	6	...	1	...	...	...	9	...	
Drainage of ganglion	1	1	...	...	...	1	...	...	...	...	...	1	..	
Scraping teno-synovitis	1	1	...	...	...	...	1	...	...	...	...	1	...	

OPERATIONS ON SKIN AND CONNECTIVE TISSUE SYSTEMS:														
Scraping sinuses	26	13	13	...	4	4	5	7	4	1	1	25	1	Died of pyonephrosis and uræmia.
" tubercle of skin	2	1	1	...	...	...	2	...	...	...	...	2	...	
" carbuncle	1	1	...	...	...	...	...	1	...	...	...	1	...	
" lupus	5	2	3	...	2	3	...	...	...	...	...	5	...	
" corn	1	...	1	...	...	...	1	...	...	...	...	1	...	
" ulcers	1	...	1	...	1	...	...	...	...	...	...	1	...	
Avulsion of nail	1	1	...	...	...	1	...	...	...	...	...	1	...	
Excision of nail bed	1	1	...	...	...	1	...	...	...	...	...	1	...	
Suture of wounds	2	2	...	...	2	...	...	...	...	...	...	1	1	
Cauterization	3	2	1	...	...	1	1	...	1	...	...	3	...	
Foreign body excised	1	...	1	...	...	...	...	1	...	...	...	1	...	
Reduction of compound separation of lower epiphysis of radius and ulna	1	1	...	...	...	1	...	...	...	...	...	...	1	Died of acute tetanus.

TABLE IV.—*Table of Infectious Diseases in Surgical Wards during the Year* 1896.

Sex.	Date of Admission.	Disease for which Admitted.	Hospital Disease.	Result and Date.
M.	February 16, 1896	Erysipelas	Erysipelas	Transferred to Medical Wards, Feb. 20.
M.	March 4, "	Sciatica	"	" " " March 5.
M.	" 12, "	Erysipelas	"	Discharged cured, March 12.
F.	April 17, "	Cellulitis of umbilicus	Cellulitis	" " April 23.
M.	June 25, "	" hand	"	" " July 1.
M.	July 29, "	" calf	"	" " August 12.
M.	August 7, "	" leg	"	" " October 4.
M.	September 16, "	" palm	"	" " September 25.
M.	" 29, "	" toe	"	" " October 14.
F.	December 8, "	Axillary abscess	Scarlatina	Sent to Fever Hospital, December 24.
M.	" 12, "	Compound separation of epiphysis of radius and ulna	Tetanus	Died, December 19.

REPORT OF CASES IN "ARDEN WARD"

(FOR DISEASES OF WOMEN)

DURING THE YEAR 1896.

By

G. F. S. GENGE

AND

J. M. G. SWAINSON.

Number of cases in "Arden" on January 1st		9
Number of cases in "Arden" on December 31st		13
New cases admitted during the year		118
Total cases treated during the year		127
Cured and relieved	102	
Unrelieved	4	
Died	6	
Transferred	2	
Under treatment	13	
		127

Cases in "Arden Ward."

Nature of Case.	No. of Case.	Initials.	Age.	Result.	No. in Register.	Remarks, treatment, &c.
Uterus:						
Fibroid tumour	I	E. R.	40	Relief	V. 92	Interstitial.
	II	A. P.	35	"	V. 138	" Wears abdominal belt.
	III	S. S.	39	"	V. 230	Submucous. Anterior wall.
	IV	E. P.	43	—	V. 248 & W. 48	Apostoli treatment; sound 6½ ins.; hæmorrhage much relieved. Still in Hospital.
	V	L. M.	40	Relief.	W. 69	Impacted. Frequent and painful micturition.
	VI	E. F.	40	—	W. 76	Cervix dilated for diagnosis. Anterior wall. Still in Hospital.
Fibroid polypus	I	F. I.	46	Cured	V. 212	Polypus removed by scissors. Albuminuria.
	II	M. S.	49	—	W. 126	" " " ecraseur. Still in Hospital.
Metritis.	I	M. C.	31	Relief	W. 94	Temperature 104° on admission.
Procidentia	I	E. N.	55	"	V. 96	Replaced. Pessary. Cervix elongated.
	II	S. W.	26	"	V. 110	Ruptured perineum.
Anteflexion	I	E. J.	22	"	V. 122	Old parametritis. Retention of urine.
Retroflexion	I	A. M.	23	"	V. 136	After confinement. Redressed. Pessary.
	II	M. B.	52	Unrelieved	V. 160	With adhesion.
	III	A. H.	24	Relief	W. 97	Cystitis.
	IV	F. B.	45	—	W. 134	Sound passed with great difficulty. Still in Hospital.
Retroversion	I	D C.	34	Relief.	V. 94	Dysmenorrhœa.
	II	H. G.	31	"	V. 164	Menorrhagia.
	III	A. H.	21	"	V. 172	Menorrhagia.

Cervix Uteri:						
Elongation	I	E. D.	40	Relief	V. 170	Some prolapse.
Polypus (mucous)	I	H. W.	26	Cured	V. 108	Twisted off.
Malignant disease	I	E. M.	35	Unrelieved	V. 114	
	II	E. O.	32	Relief	V. 116	Polypoid. Removed. Cautery.
	III	M. D.	50	"	V. 244	Scraped and cauterized.
	IV	S. B.	42	"	V. 250	" "
	V	S. B.	53	"	W. 8	" " Hæmorrhage severe.
	VI	E. M.	54	"	W. 19	Hæmorrhage severe before admission.
	VII	E. M.	43	"	W. 21	Scraped and cauterized. Incontinence of urine.
	VIII	E. S.	30	"	W. 74	(?) Specific. Taking mercury and potassium iodide.
	IX	C. S.	43	"	W. 106	" " "
Vagina:						
Cyst.....	I	E. W.	27	"	V. 178	Punctured.
Prolapse	I	F. R.	45	"	V. 118	Cystocele. Also labial abscess.
	II	M. M.	64	"	W. 109	Cystocele. Pessary.
Hymen:						
Cribriform	I	E. P.	23	Cured	V. 224	Ruptured. Vagina dilated. Vaginismus.
Vulva:						
Fibroid growth	I	E. B.	52	"	V. 152	Kidney-shaped polypus removed and base cauterized.
Injury to	I	H. H.	22	"	V. 104	
Acute vulvitis	I	E. N.	24	"	V. 103	
Labial abscess	I	E. S.	23	"	V. 134	Opened and plugged.
	II	A. P.	43	"	V. 196	" "
	III	E. A.	50	"	W. 65	" "

CASES IN "ARDEN WARD"—*continued.*

Nature of Case.	No. of Case.	Initials.	Age.	Result.	No. in Register.	Remarks, treatment, &c.
URETHRA:						
Vascular caruncle	I	A. M.	22	—	W. 121	Cauterized. Still in Hospital.
Stricture	I	E. H.	39	Relief	W. 62	Cystitis; urethra dilated, small calculus removed from bladder, pain and retention immediately relieved.
MICTURITION, DISORDERS OF:						
Retention	I	C. J.	37	"	V. 98	Old perimetritis.
	II	E. J.	22	Cured	V. 122	Hysterical.
OVARY:						
Enlarged ovary	I	A. P.	28	—	W. 88	Still in Hospital.
Chronic ovaritis	I	C. M.	34	Improved	V. 132	Dysmenorrhœa and vomiting.
	II	R. B.	23	Unrelieved	V. 226	" "
	III	S. M.	22	Relief	V. 238	
Cystic tumours	I	C. B.	35	Cured	V. 106	Ovariotomy; left; multilocular; recent adhesions; right ovary slightly enlarged.
	II	A. W.	37	"	V. 150	Ovariotomy; right broad ligament; many adhesions. Melancholia.
	III	A. M.	26	"	V. 182	Ovariotomy; right broad ligament; firm adhesions.
	IV	M. L.	37	"	V. 188	" left; many adhesions; twisted pedicle.
	V	A. S.	37	"	V. 232	" " few adhesions. Left Hospital, well, one month from admission.
	VI	C. S.	34	—	W. 117	Ovariotomy; other ovary removed 3 years ago. Still in Hospital.
	VII	K. W.	17	—	W. 123	Still in Hospital.

Malignant tumours	I	F. L.	28	Death	V. 208	Ovariotomy; right; multilocular cyst; left also diseased. Patient died 10 days after operation from primary growth. Scirrhus of splenic flexure of colon.
	II	J. C.	56	"	W. 24	Ovariotomy; Cysto-solid tumour. Too fixed for removal. Tapped.
PELVIS:						
Hæmatocele	I	C. A.	26	Cured	V. 100	Not during menstruation.
	II	E. H.	16	"	V. 120	Straining and cold during menstruation.
	III	S. R.	26	"	V. 186	Early pregnancy.
	IV	M. C.	17	"	V. 192	During menstruation.
	V	S. K.	32	"	V. 216	
Parametritis	I	E. B.	29	"	V. 148	Anterior.
	II	N. F.	24	Relief	V. 206	Left. After abortion.
	III	M. B.	43	—	V. 210	Chronic menorrhagia.
	IV	E. M.	24	Relief.	W. 36	Chronic.
	V	A. M.	37	"	W. 40	
	VI	J. C.	25	"	W. 80	
Perimetritis	I	A. A.	25	"	V. 222	Also parametritis.
	II	J. D.	39	"	V. 236	(?) After abortion. Uterus curetted.
	III	A. P.	28	"	W. 2	Chronic. Accompanied by retroflexion.
	IV	H. K.	27	—	W. 91	Still in Hospital.
Pelvic tumour	I	E. B.	46	Unrelieved	V. 202	Occupying posterior half of pelvis.
	II	E. W.	40	—	W. 114	Chief symptom, viz., pain relieved. Still in Hospital.
Contracted pelvis	I	C. C.	24	Relief	W. 83	Diagonal conjugate 3¼. Admitted in first stage of labour. Craniotomy. Recovery rapid. Child full term, large.
MENSTRUATION, DISORDERS OF:						
Dysmenorrhœa	I	C. D.	46	"	V. 240	Menorrhagia.
	II	K. S.	38	Some relief	V. 246	"
	III	P. D.	32	"	W. 6	Neurotic.
	IV	E. D.	22	"	W. 52	

CASES IN "ARDEN WARD"—*continued.*

Nature of Case.	No. of Case.	Initials.	Age.	Result.	No. in Register.	Remarks, treatment, &c.
MENSTRUATION, DISORDERS OF—*contd.*:						
Menorrhagia	I	E. T.	13½	Relief	W. 110	Very anæmic. Constipation.
	II	E. P.	46	"	V. 156	Mitral regurgitation.
	III	N. C.	36	"	V. 184	
	IV	J. C.	34	"	V. 194	(?) Fibroid.
	V	J. W.	23	"	V. 190	Metrorrhagia.
Vicarious menstruation..	I	A. R.	21	Improved	V. 174	Hæmatemesis. Faradism.
PREGNANCY, DISORDERS DURING AND AFTER						
Sequelæ of abortion	I	E. H.	32	Recovery	V. 112	Subinvolution.
	II	A. W.	30	"	V. 126	
	III	H. K.	29	"	V. 128	
	IV	E. S.	38	"	V. 162	
	V	L. L.	24	"	V. 166	
	VI	M. S.	23	"	V. 176	Portion of placenta retained.
	VII	E. L.	33	"	W. 50	
	VIII	R. H.	29	"	W. 72	Parametritis.
	IX	H. B.	26	"	W. 104	Subinvolution. Hæmorrhage.
	X	E. S.	40	"	W. 34	Placenta removed 4 days after abortion.
Abortion.....	I	A. S.	29	"	V. 130	5th month.
	II	H. K.	29	"	V. 204	3rd "
Extra-uterine fœtation..	I	P. D.	38	Relief	V. 228	Blighted. Vomiting prominent symptom.

Retroverted gravid uterus	I	M. M.	23	Relief	V. 145	At 9th week. Pessary.
	II	E. S.	37	"	V. 220	At 3rd month. Retention of urine.
Procidentia of gravid uterus	I	E. B.	31	"	V. 158	At 4th month.
Molar pregnancy	I	L. J.	40	"	W. 30	Mole discharged.
Separation of pelvic symphysis	I	M. S.	29	"	V. 140	Metal pelvic girdle.
Retention of urine after labour	I	E. L.	23	Cured	V. 234	Polyuria. Enormous distension of bladder. More than 100 ozs. drawn off on 3 occasions; once 136 ozs. drawn off.
Ruptured perineum	I	M. M.	54	—	V. 144	Prolapse of rectum. Transferred.
	II	E. P.	23	Cured	V. 218	Complete. Incontinence of fæces entirely relieved.
	III	E. B.	25	"	W. 4	" " " "
	IV	H. S.	32	"	W. 59	Partial. " " "
	V	R. D.	29	"	W. 45	Nearly complete. " " "
Subinvolution	I	A. M.	24	"	V. 90	
	II	A. C.	25	Relief	V. 198	After abortion.
Sapræmia	I	C. K.	22	Cured	V. 102	Mastitis.
Puerperal septicæmia	I	C. B.	23	Relief	V. 154	Perimetritis. Parametritis. Albuminuria.
	II	E. C.	36	Cured	V. 180	After abortion.
" pyæmia	I	E. W.	22	Death	W. 55.	Profound anæmia. Great thrombotic œdema of legs. Albuminuria. Empyema. Abscess in right iliac fossa extending into hip-joint. Pyæmic temperature for 2 months.
	II	E. G.	31	—	W. 132	Still in Hospital.
Albuminuria	I	F. P.	28	Relief	W. 12	Labour induced at 36th week.

CASES IN "ARDEN WARD"—*continued.*

Nature of Case.	No. of Case.	Initials.	Age.	Result.	No. in Register.	Remarks, treatment, &c.
UNCLASSIFIED:						
Typhlitis	I	E. C.	27	—	V. 242	Transferred to Harper.
Hystero-epilepsy	I	R. F.	26	Improved	V. 142	No fits observed.
Debility	I	A. E.	23	Cured	V. 146	
	II	A. P.	27	"	V. 168	
Chronic nephritis	I	J. F.	46	Death	V. 86	Metrorrhagia.
Abdominal swelling	I	E. W.	58	Relief	W. 100	Diarrhœa. Very obese. No new growth made out. Still in Hospital.
	II	E. E.	49		W. 129	Vomiting and constipation relieved. Still in Hospital.
Malignant stricture of colon	I	F. L.	28	Death	V. 208	Secondary deposits in ovaries. Splenic flexure.
	II	A. B.	22	"	W. 42	Very anæmic. Father died of cancer.

REPORT OF THE OUTDOOR MATERNITY DEPARTMENT FOR 1896.

By W. RIVERS POLLOCK, M.B., M.R.C.P.

During the year 1896, 235 women were delivered in the maternity department, and 236 children were born. The mortality amongst the children is high, rather more than one infant being still-born out of every 18, which is almost 5·5 per cent. There must, however, be always a high death-rate amongst the infants in the poorest classes when the mothers are attended at their own homes, and they are unable to afford the comfort of a well-trained nurse to be with them and advise when the doctor should be called in.

Of the 13 children still-born, it is interesting to notice that more than ⅔rds of the number were males. Nearly one half of the presentations were breech or footlings, of the former four, of the latter two. Two of the 13 were presenting transversely, two were born before the arrival of the attendant, and three were ordinary vertex presentations. One infant had severe purulent ophthalmia, but it made a complete recovery.

Of the 235 mothers delivered, all made a satisfactory recovery. One patient died in the first stage of labour quite suddenly from severe morbus cordis for which she had been treated during her pregnancy; she had a loud mitral systolic murmur. Below is a tabular form of the various presentations with result to the child.

Presentation.		Living Children.	Dead Children.
Vertex	189	186	3
Breech	9	5	4
Footling	2	0	2
Transverse	2	0	2
Vertex and hand ...	1	1	0
Born before arrival ...	29	27	2
Not stated	4	4	0
Totals...	236	223	13

There is nothing of much interest to be recorded about the vertex cases. In the vertex and hand presentation the arm and hand were pushed up over the chest, after which the head immediately came down and occupied the os uteri. Of the nine breech cases as stated in table above, five were born living and four dead. Three out of the nine pelvic presentations were cases where the breech was impacted; in one of the cases the forceps were successfully applied to the breech, though they slipped off twice. In another of the three a leg was brought down, and the child was resuscitated with difficulty. In the third and last case the leg was brought down, but the child was still-born; it had an imperforate anus. In the two other cases where the children were still-born, labour was premature, and the children judged to be only 7 months old.

In the two footling cases both children were still-born. One was complicated by a prolapse of the cord, and was only 7 months old. The other was complicated by a low insertion of the placenta, which caused considerable hæmorrhage and necessitated version.

In the two transverse presentations, both the children were still-born. In one the arm presented; version was performed, when it was discovered that the cord was round one leg of the infant; it was therefore ligatured and divided; the body was brought down, the arms passed over the child's head and had to be liberated, and finally forceps were applied to the after coming head. In the other case the child was born by spontaneous expulsion before the arrival of the Assistant Obstetric Physician.

In the one case of twins that occurred during the year, both children presented by the breech and both were boys. There were three cases of severe post-partum hæmorrhage, one of which was complicated by a partially adherent placenta. There were two cases of prolapse of cord; one a case of footling presentation in which the child succumbed. In the other case the occiput presented. The cord was held back till a labour pain came on, which forced down the occiput, and thereby prevented the cord from being prolapsed.

There were three cases of marginal insertion of the cord into the placenta.

Fœtus papyraceous. There was one case of this interesting abnormality:—

C. S—, æt. 20, has had 2 children. At the first confinement all went well, the mother and child making a satisfactory recovery. With regard to the second confinement, the last period was seen in January, 1896, and a healthy child was born in September of the same year. Again the mother had a good confinement, the vertex presented, and a living and healthy child was born. The membranes and placenta came away quite naturally. On examination there was discovered attached to the placenta by its membranes and in a pocket by itself a papyraceous fœtus about 10 inches long, that had probably lived about 5 months with its own membrane and placenta complete. The placenta was atrophied and fibrinous.

REPORT

OF THE

POST-MORTEM EXAMINATIONS MADE IN 1896.

By R. G. HEBB, M.D.

Cases recorded		233
Males	137	
Females	96	
General Diseases:		
Enteric fever	5	
Rheumatic fever	1	
Measles	1	
Pertussis	6	
Tetanus	1	
Diphtheria	11	
Septicæmia	6	
Rickets	1	
Tuberculosis	30	
Diabetes	3	
Lymphadenoma	1	
	—	66
Diseases of the Nervous System:		
Cerebro-spinal meningitis	2	
Myelitis	2	
Tumour	3	
Hæmorrhage	2	
Hydrocephalus externus	1	
	—	10
Diseases of the Circulatory System:		
Arteritis	8	
Endocarditis	16	
Pericarditis	2	
Adipose heart	1	
Congenital heart	2	
Rupture of heart	1	
Syncope	1	
Thrombosis	1	
	—	32
Diseases of the Respiratory System:		
Broncho-pneumonia	18	
Pneumonia	7	
Empyema	3	
	—	28

DISEASES OF THE DIGESTIVE SYSTEM:		
Tonsillitis	1	
Ulcer of stomach	3	
Dilatation of stomach	1	
Appendicitis	2	
Ulcerative colitis	2	
Stricture of colon	1	
Cancer of œsophagus	3	
Cancer of intestine	4	
Cancer of liver	2	
Icterus gravis	3	
Peritonitis	1	
Diarrhœa	11	
	—	34
DISEASES OF THE URINARY SYSTEM:		
Hypertrophy of prostate	2	
Stricture	2	
Cystitis	2	
Calculus	2	
Chronic nephritis	9	
Sarcoma of kidney	1	
	—	18
DISEASES OF THE SUPRARENAL BODIES:		
Addison's	1	
	—	1
DISEASES OF THE THYROID BODY:		
Cancer	1	
	—	1
DISEASES OF THE LYMPHATIC SYSTEM:		
Sarcoma	1	
	—	1
DISEASES OF THE ORGANS OF LOCOMOTION:		
Caries	1	
Necrosis	2	
Sarcoma	2	
	—	5
DISEASES OF THE REPRODUCTIVE ORGANS:		
Cancer of breast	2	
Cystic ovary	1	
	—	3
OPERATIONS AND SURGICAL DISEASES:		
Hernia	3	
Intestinal obstruction from peritoneal bands and adhesions	5	
Intussusception	1	
Acute periostitis	1	
Otitis	4	
Excision of tongue	1	
Œsophagotomy	1	
Lithotomy	1	
Poisoning	2	

OPERATIONS AND SURGICAL DISEASES—*continued.*		
Fractures	9	
Wound of heart	1	
Asphyxia	3	
	—	32
UNCLASSIFIED		3

Remarks and short notes on most of the foregoing cases. The numbers from 172 *to* 400 *refer to the folios in vol.* ix.; *from* 1 *to* 9 *to those in vol.* x. *of the P. M. Registers.*

GENERAL DISEASES.

ENTERIC FEVER.—213. M., 32. Ulcers of ileum only; mesenteric glands, especially those in ileo-colic angle, broken down in centre.

314. F., 25. Ulcers of ileum and colon.

326. M., 15. Ulcers of colon and ileum. Peritonitis from perforation of ileum.

348. F., 18. Ulcers of ileum and colon.

367. F., 53. Ulcers of ileum only. Pneumonia. Much exudation into pleural sacs. Transverse (lacing) fissure of liver.

RHEUMATIC FEVER.—341. F., 40. Effusion into knee-joint with white firm coagulum, size of almond; this on microscopical examination was found to be fibrinous. Recent vegetations on mitral. Numerous livid blotches on skin, and a few blebs filled with clear yellowish fluid. Calcareous and cystic degeneration of thyroid.

MEASLES.—354. M., 2. Fading rash on skin. Broncho-pneumonia.

PERTUSSIS.—249. M., $\frac{3}{12}$. Broncho-pneumonia; insufflation.

332. M., $1\frac{11}{12}$. Broncho-pneumonia; insufflation. Rickets.

347. M., $1\frac{6}{12}$. Broncho-pneumonia; insufflation. Suppurative otitis media.

398. M., $3\frac{3}{12}$. Broncho-pneumonia; insufflation.

7. F., $2\frac{3}{12}$. Broncho-pneumonia; insufflation; chronic pleuritis.

8. F., $4\frac{1}{2}$. Broncho-pneumonia; insufflation. Early tuberculosis.

TETANUS.—3. M., 15. Lacerated wound of right forearm just above wrist; rupture of median nerve and fracture of

radius and ulna at epiphyses; ends of shafts dry, dark-coloured, and slightly eroded. Cord and brain nil.

DIPHTHERIA.—177. F., $2\frac{6}{12}$. Tracheotomy; antitoxin. Membrane on fauces and from epiglottis to bronchi.

190. M., 2. Membrane on uvula and epiglottis. Suppurative tracheo-bronchitis; broncho-pneumonia. Muco-purulent fluid in both middle ears.

199. F., $3\frac{3}{12}$. Tracheotomy. Thick membrane on nasal mucosa, and from vocal cords downwards to bronchi. General tuberculosis.

217. F., $3\frac{7}{12}$. Chronic tonsillitis with ulceration; death from syncope; diphtheritic palsy.

218. M., $2\frac{6}{12}$. Antitoxin. Membrane on nasal, faucial, and laryngeal mucosa, ending in bronchi as suppurative bronchitis.

256. F., $2\frac{4}{12}$. Tracheotomy; antitoxin. Membrane on nasal, faucial, and laryngeal mucosa, extending as far as tracheotomy wound. Broncho-pneumonia.

331. F., $3\frac{1}{2}$. Membrane on fauces, and from epiglottis to bronchi. Broncho-pneumonia. Chronic tonsillitis. Tracheotomy.

343. F., 3. Diphtheritic palsy. Syncope. Blood in cardiac cavities, fluid, frothy, bright red. Lymphatic glands caseous and tubercular.

349. F., 2. Tracheotomy; antitoxin. Membrane on faucial, laryngeal, and tracheal mucosa. Suppurative bronchitis. Broncho-pneumonia.

397. M., 5. Tracheotomy. Membrane from epiglottis to bronchi. Suppurative bronchitis. Broncho-pneumonia. Mesenteric and mediastinal lymphatic glands caseous and calcified.

SEPTICÆMIA.—227. F., 32. Septic pleuritis and pneumonitis. Chronic perihepatitis. Spleen 14 ozs.; very soft; almost black; free; homogeneous. Internal aspect of dura mater covered with thin, soft, red clot. Small piece of necrosed bone was found lying against left side of septum nasi, but the nasal mucosa, though thick and velvety and covered with pus, was found to be intact.

280. M., 21. Diffuse abscesses about right shoulder, left forearm, and hand, and back of head. Occipital protuberance bare and dry. Septic hæmorrhagic pleuritis and pneumonitis.

Firm adherent decolorised clot in inferior cava, common iliacs, and left femoral veins. Liver 87 ozs., fatty. Thyroid large, colloid. Thymus persistent, of moderate size. About 10 ozs. of greasy, slimy pus, but no lymph in peritoneal sac.

294. F., 40. On opening both wrist joints the carpal bones were found to be devoid of cartilage; they were smooth and yellowish; there was no fluid in the joints. Bar advanced post-mortem decomposition there were no other noteworthy appearances.

352. F., $\frac{10}{12}$. Body extremely emaciated. Weight 4 lbs. 6 ozs. On the upper part of left arm is a nearly healed vaccination sore, $\frac{1}{2}$ inch by $\frac{1}{8}$ inch; its surface is depressed and covered with scab. Round about the shoulder are the healed pits, or the remains of numerous pustules, some being dried up, but most in the healing stage. In the left leg and thigh are surgical wounds, which lead into cavities beneath the skin and above muscles, the latter being exposed. No pus in cavities. Brain, thoracic and abdominal viscera, nil. Joints and ears, nil. The left canal of back is patent as far as the labium.

376. F., $\frac{11}{12}$. Subcutaneous small abscesses. Suppurative otitis media. Septic pleuritis and pneumonitis.

394. F., 22. Puerperal. Septic pleuritis and pneumonitis. Inferior cava, most of the pelvic veins, and veins of both lower extremities blocked with firm decolorised adherent clot. Left renal vein also thrombosed, the kidney being almost white. No coagula in veins of broad ligament. Uterus and appendages fairly normal. Suppurative arthritis of right hip joint. Diffuse abscess of soft tissues of right flank, buttock, and upper part of thigh.

TUBERCULOSIS.—194. F., $2\frac{3}{12}$. Miliary tuberculosis of thoracic and abdominal viscera.

198. M., 44. Chronic phthisis. Pulmonary and intestinal tuberculosis. Chronic aortitis.

206. F., $4\frac{3}{12}$. Tubercular meningitis. Tubercular caseations in lungs; bronchiectasis, the bronchi in lower lobes terminating in saccular expansions. Tubercular ulcers of ileum. Mediastinal glands much enlarged and caseous. Suppurative otitis media.

209. M., 26. Chronic phthisis. Pulmonary and intestinal tuberculosis. Empyema.

221. F., 48. Chronic phthisis. Pulmonary and intestinal tuberculosis. Tubercular laryngitis. Recent vegetations on mitral, and endocardium of left auricle. Complete transposition of thoracic and abdominal viscera.

231. M., 54. Chronic phthisis. Pulmonary tuberculosis. In abdominal aorta at level of renal arteries is a patch of ulcerating aortitis, $1\frac{3}{4}$ by $\frac{1}{3}$ inch, on which is deposited a granular fibrinous clot. Anterior half of both feet in condition of dry gangrene.

232. M., 18. Tuberculosis of pleura, lungs, pericardium, peritoneum, spleen, and liver. Kidneys 9 ozs.; small white granular.

244. M., 2. Tuberculosis of lungs, intestine, and lymphatic glands. Thrombosis of left lateral and superior longitudinal sinuses, of the pial veins over the temporo-sphenoidal and parietal regions, and of veins of choroid plexus. Atrophy of brain (28 ozs.) most evident in parietal and temporo-sphenoidal regions. Nervous tissue flabby, but no actual softening. No dilatation of ventricles. Large quantity of fluid in inter-meningeal space.

252. F., $\frac{10}{12}$. Tuberculosis of lungs and abdominal viscera; tubercular dactylitis.

255. F., $\frac{8}{12}$. Miliary tuberculosis of lungs and abdominal viscera. Suppurative otitis media.

258. M., $3\frac{1}{2}$. Tubercular peritonitis. Tubercular caseation of mesenteric and mediastinal lymphatic glands.

259. M., 5. Tubercular meningitis of brain and cord. Tuberculosis of liver, spleen, and kidneys. Simple broncho-pneumonia and recent pleuritis. Suppurative otitis media.

261. M., 5. Tubercular meningitis of brain and cord. Caries of 4th and 5th lumbar and 1st sacral vertebræ. Suppurative otitis media. Simple broncho-pneumonia.

263. F., 36. Chronic phthisis. Tubercular pneumonic form. Hour-glass contraction of stomach from cicatrisation of ulcer at middle of lesser curvature.

268. M., 1. Tuberculosis of lungs, liver, spleen, and kidneys, and mediastinal glands; empyema.

275. M., 42. Chronic phthisis. Pulmonary and intestinal tuberculosis. Cirrhosis of liver.

285. M., 34. Chronic phthisis. Tuberculosis of lungs and

intestines. Heart $8\frac{3}{4}$ ozs. Kidneys $20\frac{1}{2}$ ozs., typical large white. Spleen 10 ozs., amyloid malpighians. Thrombosis of veins of left lower extremity and of left pelvic veins.

283. F., 34. Chronic phthisis. Tuberculosis of lungs. Chronic peritonitis. Spleen 10 ozs., amyloid. Kidneys, R. 7 ozs., L. 13 ozs., large white with cortical atrophy of middle third of right, of lower end of left, elsewhere the cortex is large and surface smooth. Uterus large; hydrosalpinx; ovaries indurated.

286. M., 36. Chronic phthisis. Pulmonary tuberculosis. In one of the vomicæ is some recent clot, and the bulbous aneurysm of a pulmonary vessel.

288. M., 52. Chronic phthisis. Pneumonic form on which an extensive tuberculosis had been grafted. Lungs large, heavy (R. 73 ozs., L. 57 ozs.), almost black. Heart 11 ozs. Pericardium adherent at apex. Coarse vegetations on mitral. Lymphatic glands large and much pigmented. Microscopical examination of lung shows (*a*) emphysema; (*b*) anthracosis; (*c*) chronic pneumonia; (*d*) caseous tubercles.

289. M., $5\frac{3}{12}$. Tubercular meningitis. Tubercular caseations in lungs, spleen, and lymphatic glands.

303. M., 20. Chronic phthisis. Tuberculosis of lungs, intestines, and lymphatic glands.

316. F., 3. Miliary tuberculosis of lungs and abdominal viscera.

321. M., 46. Chronic phthisis. Tuberculosis of lungs, lymphatic glands, liver, spleen, and kidneys.

329. F., 3. Tuberculosis of lungs, lymphatic glands, peritoneum, intestines, uterus, bladder, and kidneys. Spleen $5\frac{3}{4}$ ozs. Amyloid malpighians.

335. F., 38. Chronic phthisis. Tuberculosis of lungs and intestines. Heart $8\frac{1}{4}$ ozs. Mitral flaps thickened, chordæ shortened; vegetations, coarse and numerous, along margin of valve.

343. F., 20. Chronic phthisis. Pneumothorax; tuberculosis of lungs and intestines.

350. F., 27. Chronic phthisis. Tuberculosis of larynx, lungs, and intestines. Fibroid tumour size of nut on left ovary.

391. F., $2\frac{3}{12}$. Tuberculosis of lungs, intestines, lymphatic glands, and liver. Had recently been operated on for adenoid vegetations of nasopharynx. The intestinal mucosa is remark-

able for the number and size of the solitary and agminate glands.

400. M., 38. Chronic phthisis. Well-marked emphysema. Cavity size of tangerine orange at right apex. Fibrosis with pigmentation of upper lobes. A few areæ of fibro-pneumonic consolidation in both lungs. Microscopically the consolidation areæ show foci of chronic pneumonia plus pigmented fibro-caseous tubercles; there are numerous giant cells. No tubercle bacilli were found in the expectoration during life, nor post-mortem in the contents of cavity, in crushed up portions of the pneumonic caseating foci, nor in sections of the same. The propriety of inserting this case under tuberculosis seems doubtful.

DIABETES.—330. F., 64. Tuberculosis with excavation of lungs; exudation into pleural sacs; tubercular deposit in stomach, intestines, peritoneum, kidneys, and left fallopian tube. Pancreas 2 ozs., otherwise nil.

364. M., 65. Lungs emphysematous, pigmented; left upper lobe in condition of chronic pneumonia, with large central cavity. Arteries atheromatous. Pancreas 2¾ ozs., flabby, nil. Prostate large, partly from hypertrophied gland tissue, partly from spheroidal myomatous tumour, size of small nut, in right half.

375. M., 60. Lungs emphysematous, much pigmented; left pneumonic throughout, with large vomica in upper lobe; a few consolidations in right lung; lymph and turbid fluid in left pleural sac. Arteries, bar thoracic aorta, in condition of calcareous atheroma. Pancreas 1¾ ozs., indurated.

LYMPHADENOMA.—340. M., 7. Internal surface of dura mater covered over with thin soft coagulum. Thin deposit of soft lymph on spicardium and on spleen. Liver 30 ozs., reddish brown and mottled all over with yellowish spots. Spleen 8 ozs., firm, homogeneous, dark red; a few small areas of "suety" deposit. Lymphatic glands at left side and at root of neck and round about pancreas are much enlarged; they are firm, elastic, homogeneous, smooth on section, and pale drab in colour. Microscopical examination:—Liver, shows areas filled with small and a few large sarcomatoid cells; in a few places

there is fibrosis. The cells have circular nuclei and a small amount of plasma. The areas are mostly about the portal canal systems, and apparently mostly affect the bile ducts. In some places the areas are degenerated. Spleen, the ordinary structure is apparent, but there is considerable alteration from fibrosis, especially of the malpighian bodies; the "suety" patches are areas of fibrosis. Lymphatic glands: in these most of the normal structure is supplanted by a fibrosis of similar character to that in the spleen.

Diseases of the Nervous System.

Cerebrospinal Meningitis.—202. M., $\frac{9}{12}$. Collection of 5 ozs. of greenish yellow pus lay in intermeningeal space over fronto-parietal portion of left hemisphere; convolutions flattened; excess of fluid in ventricles, the walls of which are softened and disintegrated. In subarachnoid space of brain and cord are numerous large collections of pus, that in the cord being almost continuous. Greenish yellow pus in both middle sacs. P.M. digestion (19 hrs.) of stomach, diaphragm, and of base of left lung.

1. $4\frac{1}{2}$. Greenish yellow pus in subarachnoid space of brain and cord, excess of intra-ventricular fluid, which is turbid; iter dilated. Cyst size of filbert on under and anterior portion of left lobe of cerebellum close to fissure. Contents, clear watery fluid.

Myelitis.—236. M., 39. Softening of cord from cervical region downwards; process most advanced in cervical region, where the marrow is almost diffluent; the softening is marked by intense hyperæmia; the softening decreases downwards, and in the lumbar region the grey matter only is pink, the white being fairly firm. No meningitis. Sciatic nerves extremely flabby and thin. Cystitis. Microscopical examination of cervical region of cord. The normal anatomical appearances are much altered though not entirely lost, for in places certain details are apparent, such as the central canal, many tubules and degenerated cornual cells. The sections show considerable hyperæmia with some extravasation in places. Most of the cornual cells are swollen up and devoid of nucleus. The tubules

are unrecognisable in the most disorganised parts. The area most involved is central, *i.e.*, the middle of the cord.

393. F., 46. Grey matter of lumbar region pink, otherwise central nervous system not specially noteworthy bar patch of old softening at front of right corpus striatum, low down where it involves both nuclei and internal capsule. Cystitis. Thyroid ½ oz. Sacral and trochanteric bedsores. Microscopical examination of cord shows (*a*) hyperæmia of cervical, dorsal, and lumbar regions; (*b*) the vessels both in cord and of pia are surrounded by leucocytes; (*c*) many of the multipolar cells are atrophied, and some granular.

TUMOUR.—226. F., 3. Glioma of under surface of left lobe of cerebellum; pons and medulla pushed over to right. Nerves on left side from 5th backwards involved by the growth. Cerebral ventricles much distended. Convolutions flattened.

248. M., 69. Glioma of cervical region of cord, which occupies its central and posterior parts so that the cord is pushed out as a crescent-shaped mass in front. In the centre the tumour is breaking down. Microscopical examination of cord shows (*a*) glioma, (*b*) sclerosis of posterior columns as far as decussation, (*c*) degeneration of grey substance and irregular patches where tubercles have atrophied in white matter. Chronic arteritis and hypertrophy of left ventricle. Cystitis; hypertrophy of bladder and prostate. The latter apparently from glandular hypertrophy. On microscopical examination the prostate shows dilated saccules lined by columnar epithelium, and in a few places there is proliferation of cells outside the basement membrane.

395. F., 43. Tumour, 1⅜ by 1 by ⅝ inch, practically free in intermeningeal space of cord in upper cervical region, which is much flattened by the pressure. The tumour also indents under surface of cerebellum. The tumour is very firm and its surface quite smooth. It is a fibrosing glioma. The cord shows degeneration areas of most irregular distribution all the way down. These are most extensive in the upper part, and while diminishing in size all the way have no direct continuity. In character, microscopical examination shows them to be merely atrophic. Both grey and white substances are involved in places.

HÆMORRHAGE.—183. M., 60. Hæmorrhage into right basal ganglia. Clot in lateral and 3rd ventricle, iter and 4th ventricle. Heart 17 ozs. Hypertrophy of left ventricle. Chronic arteritis. Kidneys $7\frac{3}{4}$ ozs., small red granular. Urate of soda in all joints of lower extremities; none in upper.

240. M., 45 (circa). Brought in dead. Hæmorrhage into pons, which is almost destroyed. Clot in 4th ventricle. Some few patches of atheroma of arteries at base of brain, but aorta and larger arteries normal. Heart 16 ozs., hypertrophy of left ventricle. Liver 80 ozs., fatty. Kidneys 12 ozs., normal. Joints nil.

HYDROCEPHALUS EXTERNUS.—305. M., $1\frac{7}{12}$. Body much emaciated; arms stiff and twisted inwards so much that the palms nearly look forwards. Head large; frontal region bulging; anterior fontanelle large; sutures loose; ossification of calvarium irregular. Brain 24 ozs. Dura much thicker than normal. On cutting through dura quite half a pint of clear watery fluid escaped; this came from the intermeningeal space, and had exerted equal pressure on the brain, which was quite symmetrical, and except for its size was quite normal in appearance. The cerebral ventricles are quite normal and the convolutions are well marked. There is no evidence of leptomeningitis. Greenish yellow muco-purulent fluid in both middle ears. Tubercular caseations in lungs and bronchial glands.

For other collections of fluid in intermeningeal space see also 202 (cerebrospinal meningitis) and 244 (tuberculosis).

DISEASES OF THE CIRCULATORY SYSTEM.

ARTERITIS.—174. F., 46. Calcareous atheroma of large, medium, and small arteries. Heart 18 ozs.; left ventricle hypertrophied. Spleen 14 ozs. Kidneys 6 ozs., granular, firm, pale red. Scar of healed gastric ulcer on lesser curvature.

270. M., 61. Arteries throughout very atheromatous. Heart 25 ozs.; hypertrophy of left ventricle; fibro-caseous degeneration of wall of ventricle. Viscera cardiac. Kidneys 16 ozs., red, firm; a few cysts in cortex, the surface of which is slightly granular.

193. M., 44. Soft atheroma of all arteries. Aneurysm, size of cricket ball, of first part of arch, bursting into pericardial sac. Heart normal.

219. M., 38. Aortitis only, other arteries normal. Aneurysm size of cocoa-nut, of transverse arch; pressure on sternum, clavicle, and rib, which are necrosed, and on trachea and right bronchus, which are ulcerated. Heart normal. Tuberculosis of right lung only.

225. F., 56. Aorta throughout in advanced condition of atheroma. Large aneurysm of transverse arch, which had absorbed six ribs in front, eventually bursting into right pleural sac and causing collapse of lung. Much laminated clot in sac. Heart normal.

274. M., 33. Aneurysm of transverse arch, eroding bodies of 5th and 6th dorsal vertebræ and the cartilages at lower part of trachea. Heart large; aortic valve incompetent. Viscera cardiac.

307. M., 39. Aneurysm of transverse arch and innominate, size of a cricket ball. Pressure necrosis of 1st rib, clavicle and top of sternum. Heart small. Two cusps of pulmonary valve adherent; some coarse vegetations on this valve; rest of endocardium nil.

382. M., 49. Aorta throughout very atheromatous; two large aneurysms of thoracic aorta; both sacs filled with laminated fibrin. Erosion of bodies of 2nd and 3rd dorsal vertebræ and adjacent parts of their ribs by one aneurysm, and bodies of 10th, 11th, 12th dorsal and 1st lumbar by the other. The lower sac had ruptured just about level of tracheal bifurcation. Heart 15 ozs.; some 5—6 ozs. of turbid fluid and lymph in pericardial sac; valves normal; excess of subepicardial adipose tissue.

ENDOCARDITIS.—196. M., 43. Heart 18 ozs.; hypertrophy and dilatation. Aortic cusps ulcerated and festooned with coarse vegetations, which stenose the orifice; crateriform ulcer on large flap of mitral. Spleen 32 ozs., one infarct. Abdominal viscera "cardiac."

301. F., 37. Heart 18½ ozs.; hydro-pericardium. Mitral valve thickened and orifice stenosed; endocardium of left auricle and mitral valve covered with coarse thick vegetations; other

valves nil. Viscera "cardiac." Infarcts in spleen and kidneys. Brain 44 ozs. left. Middle and posterior cerebral arteries embolised, their supply area being in condition of yellow softening, viz., 3rd frontal, insula, and as far inwards as caudate nucleus; about two-thirds of temporo-sphenoidal cortex. Microscopical examination of cord shows well-marked descending degeneration of lateral column.

368. M., 59. Heart 20 ozs. Vegetations on endocardium of left auricle, on mitral, which is also ulcerated, and on aortic valve. Hypertrophy and dilatation of left auricle and ventricle. Small arteries atheromatous. Spleen 30½ ozs., firm; black from great engorgement; numerous infarcts. Infarcts in kidney. Microscopical examination of spleen shows numerous large colonies of streptococcus, the chains of which are very long.

384. M., 46. Heart 11¾ ozs. Vegetation mass, size of filbert, on large flap of mitral; rest of endocardium nil. Aorta in condition of soft atheroma. Pleuro-pneumonia. Suppurative meningitis. Large collections of cocci with halo in pus from meninges.

176. F., 25. Heart 16 ozs. Mitral stenosis; left auricle large and wall thick. Pericardium adherent. Hæmorrhagic infarcts in lungs. Abdominal viscera "cardiac."

243. F., 13. Heart, with adherent pericardium, 23 ozs. Stenosis of mitral. Viscera "cardiac."

251. F., 34. Heart 17½ ozs. Mitral stenosis. Recent vegetations on tricuspid and aortic valves. Hæmorrhagic infarcts in lungs; middle branch of right pulmonary artery firmly embolised by decolorised clot. Placental remains on uterine wall.

257. M., 43. Heart 23 ozs.; hypertrophy of left ventricle. Mitral stenosis. Aortic cusps rough and thickened; two adherent. Arteries in condition of soft atheroma.

297. M., $1\frac{6}{12}$. Vegetations on mitral and tricuspid valves. Rickets.

388. F., 43. Heart, with adherent pericardium, 24½ ozs. Mitral stenosis. Recent vegetations on aortic cusps. Firm, partially decolorised clot extends from innominate vein up left jugular into lateral sinus, reaching as far as torcular. Left subclavian and brachial veins are also thrombosed. Viscera "cardiac."

5. F., 14½. Heart, with adherent pericardium, 20 ozs. Mitral stenosis; recent vegetations on mitral and aortic valves. Circumference of aorta immediately above valve 2⅛ in.; at end of abdominal ⅞ in.; wall very thin. Viscera "cardiac."

281. M., 59. Heart 20 ozs. Aortic incompetence. Chronic arteritis. Viscera "cardiac."

356. M., 60. Heart, with adherent pericardium, 43 ozs. Aortic incompetence. Mitral flaps thickened, adherent, and chordæ shortened. Atheroma of medium and small arteries.

385. M., 40. Heart 30¼ ozs. Aortic incompetence. Hæmorrhagic pericarditis with much exudation into pericardial tissue and into sac. Aorta in condition of soft atheroma. Viscera "cardiac."

392. M., 63. Heart 17¾ ozs. Aortic stenosis; cusps of valve calcified and rigid; orifice crescentiform and extremely narrow. Moderate chronic arteritis. Viscera "cardiac." Hypertrophy of prostate.

309. F., 62. Heart 13 ozs. Stenosis of tricuspid, mitral, and aortic valves. General chronic arteritis; in numerous places the intima is ulcerated and covered with clot, notably at lower part of aorta and in iliacs; both middle cerebrals are thrombosed and the innominate is plugged throughout with firm adherent clot. The supply area of left middle cerebral is quite softened and the pia adherent, the middle third of the cortex and subjacent tissue of the left hemisphere being quite disorganised. A similar but earlier condition exists in right hemisphere. Viscera "cardiac."

PERICARDITIS.—304. M., 1$\frac{9}{12}$. About 5 ozs. of turbid fluid and lymph in pericardial sac, lymph in both pleural sacs, and left lung semicarnified.

308. M., 27. Pericardium much thickened from interstitial inflammatory exudation, and lymph on surface which unites the opposing surfaces. Aortic cusps thickened and recurved; recent vegetations on mitral. Semi-purulent fluid in left pleural sac. Viscera "cardiac."

ADIPOSE HEART.—353. M., 56. Brought in dead. Heart 15 ozs., much subepicardial adipose tissue: in diastole. Liver 77 ozs., soft, fatty (?). Spleen 6¼ ozs., almost diffluent. Kidneys

14 ozs., normal. All joints of lower extremities up to knee contain urate of soda, but there is no obvious arthritis.

CONGENITAL HEART.—279. M., $\frac{2}{12}$. Heart $1\frac{3}{4}$ ozs. Right side large and hypertrophied; stenosis of pulmonary valve, which is beset with firm coarse vegetations; foramen ovale patent. Large defect of interventricular septum at undefended space; ductus closed. Anus very narrow and stenosed, opens on to surface by 2 small apertures separated by thin septum; the rectum is much dilated.

315. F., $1\frac{8}{12}$. Heart $3\frac{1}{2}$ ozs. Saccular dilatation of apex of left ventricle, size of spanish nut; wall tough and fibrous, contains an adherent ante-mortem polypus. The muscular tissue of septum near base and adjacent parts of ventricles is yellow and softish, but there is no breaking down. The endocardium is quite normal. Microscopical examination of yellow areæ in wall of heart shows an invasion of cardiac tissue by round cells, the nuclei of which are large and the cytoplasm small; there is no evidence of exudation; the cells appear to me to be neoplastic rather than inflammatory, and resemble those of lymphosarcoma. There are no enlarged lymphatic glands. Viscera "cardiac." Rickets.

RUPTURE OF HEART.—351. M., 66. Brought in dead. Heart 12 ozs. Spontaneous rupture of wall of left ventricle; too decomposed for microscopical examination.

THROMBOSIS.—242. F., $\frac{10}{12}$. Thrombosis of left renal vein and part of inferior cava. Left kidney enlarged from venous engorgement. Broncho-pneumonia. Cover glass preparations from clot in renal vein (Gram and alkaline methylen blue) show numerous bacteria, chiefly short and thick and in pairs; a few are longer and all have well-marked halo.

DISEASES OF THE RESPIRATORY SYSTEM.

BRONCHO-PNEUMONIA.—291. M., 54. Chronic pleuritis; emphysema; suppurative bronchitis; bronchiectasis (saccular). Numerous foci of consolidation, some exhibiting central cavity, and in right middle lobe is a vomica, size of walnut; is in free communication with large bronchus. Left inguinal

canal widely patent; the peritoneal sac descends to bottom of scrotum; testicle atrophied, lies just below external ring.

337. F., $3\frac{7}{12}$. Greater part of both lungs pneumonic, and many bronchi dilated, the expansions being filled with pus; greenish yellow pus in both middle ears.

360. F., $1\frac{10}{12}$. Ante-mortem polypus size of almond at apex of left ventricle.

9. M., $3\frac{6}{12}$. Chronic pleuritis; broncho-pneumonia of both lungs. Cancrum oris; necrosis of left half of upper jaw.

PNEUMONIA.—211. M., 50. Grey hepatisation with much exudation into both pleural sacs. Perforation of right membrana tympani; middle ear full of pus, which contains large numbers of diplococci with capsules (Gram and alkalin methylen blue).

230. M., 51. Grey hepatisation with central location; chronic pleuritis; emphysema; bronchiectasis; suppurative bronchitis.

234. M., 43. Red hepatisation. Granular kidneys. Brain 46 ozs.; middle two-thirds of right hemisphere bespotted with bright red lines and puncta, and of a yellow colour.

282. F., 60. Red and grey hepatisation; lung sections stained with alkalin methylen blue, or by Gram's method, show crowds of long bacilli and filaments. Heart 8 ozs.; vegetations on mitral. Cholestrin calculus in gall-bladder.

292. M., 38. Grey hepatisation; emphysema; chronic pleuritis.

372. F., 42. Grey hepatisation. Skin in condition of "exfoliative dermatitis." Uterus 7 inches long; wall soft and flabby. Placental site on posterior aspect of fundus; mucosa ragged, soft, and covered with sanious fluid; appendages nil.

6. M., 50. Grey hepatisation; emphysema.

EMPYEMA.—205. M., 30. Right pleura much thickened; several pints of pus in sac; small hole in pleura about middle of lower lobe, leads directly into bronchus. Collapse of lung; encapsulated abscess of left kidney. Ankylosis of right knee joint. No tuberculosis.

389. F., $\frac{7}{12}$. Empyema cavity of right thorax; resection of 8th rib; broncho-pneumonia; suppurative bronchitis.

399. F., $2\frac{10}{12}$. Empyema cavities of both thoraces; right

cavity large, empty, drained by resection of 8th rib; left small, contains 1—2 drachms of thick pus. The walls of both are extremely thick, tough, and fibrous. Broncho-pneumonia. No tuberculosis.

Diseases of Digestive System.

Tonsillitis.—373. F., 3. Tonsils large and deeply ulcerated. Pharyngeal mucosa is over one-third of an inch thick from hyperplasia of lymphatic tissue; a similar hyperplasia exists in small intestine. Tracheotomy.

Ulcer of Stomach.—175. M., 54. Punched out ulcer, size of crown piece, on posterior aspect of cardiac end; base adherent to pancreas; from the centre projects open mouth of large artery. Stomach filled with clot.

180. M., 45. Ulcer, size of shilling, on posterior aspect, close to middle of lesser curvature; open vessel in floor. Pneumonia. Urate of soda in joints; gouty arthritis.

383. F., 43. Perforating ulcer of anterior surface close to middle of lesser curvature. Peritonitis. Uterus $3\frac{1}{4}$ inches; mucosa, quite $\frac{1}{8}$ inch thick, is purple, velvety, and smooth; large corpus luteum in right ovary. Microscopical examination of mucosa shows early or preparatory stage of menstruation (see also 265, nephritis). Mucosa intact, but the vessels are greatly dilated and engorged. Submucosa thick, and the glands numerous.

Dilatation of Stomach.—192. M., 55. Enormous dilatation of stomach from contraction of duodenum; lower end of œsophagus much thickened from deposit of fibrous tissue, and the surface much ulcerated. The passage through duodenum (first part) is not larger than a goose quill, and the contraction probably due to cicatrisation of duodenal ulcer.

Appendicitis.—223. M., 36. Ulceration of appendix. Peritonitis. Fæcal calculoid.

336. M., 4. Ulceration of appendix, which is behind head of colon. Diffuse abscess passing forwards and upwards on right side of abdomen, then between liver and stomach to back of transverse colon, with which at splenic flexure it is in communication by a small aperture; from this site the abscess has

passed upwards, traversing the diaphragm into the left pleural cavity, which contains much purulent fluid and lymph, the lung being pneumonic. Fæcal calculoid in appendix. There is no general or acute peritonitis.

ULCERATIVE COLITIS.—323. M., 26. Considerable thickening and induration of colon, with denudation of mucosa. The thickening is due to chronic inflammatory deposit. Rest of intestine normal. Mesenteric glands soft, pale drab.

344. F., 36. Dilatation and softening of colon, the mucosa of which is for the most part ragged off, apparently as slough from diffuse (?) suppurative inflammation of submucosa. Small intestine normal. Mesenteric glands not enlarged or abnormal.

STRICTURE OF COLON.—333. M., 65. Fibrous stricture of sigmoid, the mucosa of which is thick, soft, and velvety. Strictured portion, which is 2 inches long, is adherent to bladder, and in communication therewith by a circular aperture which will admit a No. 10 catheter. Gut above stricture much dilated; wall has given way just above stricture. Peritonitis. Chronic arteritis; ante-mortem thrombosis of lower end of aorta and of iliacs. Mucosa of bladder pigmented, otherwise nil.

CANCER.—173. F., 27. Annular stricture-ulcer of lower part of pharynx and upper part of œsophagus. Necrosis of laryngeal cartilages. Pneumonia. Squamous epithelioma.

295. M., 59. Soft malignant growth involving about 4 inches of the œsophageal tube. Deposits in lungs and mediastinal and cervical lymphatic glands. On microscopical examination it was found that the cells from œsophageal growth were spindle shaped, their nuclei being oval or spindle shaped; while those from the deposit were squamous or polyhedral, and their nuclei circular or round. The cell margin is well defined, while the cytoplasm is tenuous.

379. M., 61. Epitheliomatous ulcer of œsophagus; annular, 2½ inches long from level of root of neck. Gastrostomy. Diffuse suppurative inflammation of sub-peritoneal and mediastinal cellular tissue.

237. M., 56. Cancerous stricture of rectum 4½ inches long. Deposits in peritoneum and liver, and at bottom of sac of con-

genital inguinal hernia. Microscopically, a columnar epithelioma. Thyroid very large; projecting from front of lobes are two masses not unlike thyroid lobes in shape, but resembling in appearance fibro-muscular tissue. Microscopically, the accessory lobes show much fibrosis and closed follicles devoid for the most part of any secretion.

299. F., 28. Cancerous stricture of colon at splenic flexure; secondary deposits on peritoneum. Acute general peritonitis. Uterus small, anteflexed; right appendages absent; left ovary, size of a turkey's egg, is a mass of cysts with watery contents. Microscopical examination shows columnar epithelioma with colloid degeneration in places.

365. F., 22. Cancerous ulcer of sigmoid with large mass of deposit in pelvis. Suppurative peritonitis. Microscopically the growth presents in some places appearances of alveolar carcinoma, in others of sarcoma.

2. F., 51. Cancerous stricture of sigmoid, with infiltration of pelvic cellular tissue. Peritonitis. Pigmented fibro-caseous tubercles in lungs and vomica size of walnut at right apex. Microscopical examination shows columnar epithelioma.

224. M., 32. Liver 123 ozs.; primary large mass of cancer with numerous secondary deposits in liver; some prevertebral glands infiltrated; jaundice. Microscopically, there is a connective tissue stroma in which run long tortuous tubules and columns of cuboidal cells; they suggest an origin from medium-sized bile ducts.

327. F., 48. Primary cancerous mass in liver, which also shows secondary deposits. Gall-bladder contains 30 facetted calculi; larger bile ducts much dilated. Secondary deposits in peritoneum, pancreas, abdominal lymphatic glands, and ovary. Microscopical examination of liver shows a close network of inosculating large epithelioid cells with round or oval nuclei in the cancerous parts. There is practically no evidence of presence of columns or tubules of cells or of alveolation. The ovary shows a coarse fibrous stroma in which are both cylinders and tubules of epithelioid cells.

ICTERUS GRAVIS.—253. F., 38. Deep jaundice. Liver 24½ ozs., flabby, though firm, greater part red and rest of it bright yellow. Microscopical examination of yellow portion. Liver

structure discernible, but almost all the liver cells are degenerated; along both hepatic and portal areas there is much fibrosis apparently of a degenerative character. In places there are collections of nuclei. The connective tissue framework of liver is as degenerated as the cells. In the red portion there are very few cells left; the hepatic tissue is represented by well-marked collections of bile ducts on the outer zone of the lobules and by a highly vascular connective tissue stroma, in the middle of which is the central vein. There are large collections of nuclei or of leucocytes around the portal canals and bile ducts.

269. F., 29. Slight jaundice. Liver 49 ozs. Greater portion of liver is yellowish with green discoloration; this portion is of firm consistence and apparently not abnormal in structure. The rest of liver is of soft consistence of a bright canary yellow colour, and its normal appearance quite lost. Microscopical appearances—well-marked reaction with osmic acid; hepatic framework well seen, while the liver cells are represented by oil globules and granular detritus. In the yellow portions the destruction is perhaps more marked, and here there are as well many granules of bile pigment.

317. F., 60. Slight jaundice. Liver 43 ozs., flat, flabby, smooth, of a bright yellow hue all over; gall-bladder empty. Microscopical examination shows extreme fatty degeneration of all the liver cells with granular debris; the hepatic stroma stains badly.

PERITONITIS.—317. F., 5. Idiopathic; no obvious lesion; about 5—6 ozs. of pus in sac. Pus contains a diplobacillus sometimes occurring in small chains; stains well with alkalin, methylen blue, and Gram.

DISEASES OF THE URINARY SYSTEM.

HYPERTROPHY OF PROSTATE.—172. M., 68. General and symmetrical enlargement of prostate; hypertrophy and sacculation of bladder; cystitis. Kidneys 12 ozs.; cysts of cortex; both ureters dilated. Both inguinal canals patent, the right for 2 inches, the left into scrotum.

200. M., 79. Prostate size of small orange with central lobe on floor of urethra; this projects upwards occluding passage like a valve. Vesiculæ contain a little brownish fluid in which

no spermatozoa were found. Kidneys 14 ozs.; cysts of cortex. Arteries atheromatous, left ventricle hypertrophied. Bones of legs procurved and much thickened in middle half of shaft. On section the bone is very dense and ivory like; central canal large; the marrow of upper two-thirds is dark red and soft, of lower third soft and yellow; periosteal surface is rough and uneven. Skull cap thick and the bone dense and ivory like. Numerous bosses of bone on bodies of vertebræ and about joints. Joint cartilages quite normal. (Osteitis deformans). Fresh red marrow shows large numbers of granular (eosinophilous) leucocytes. Fixed red marrow shows reticulum of cells with large round or oval nuclei and variable amount of cytoplasm; many leucocytes with large granules and some osteoclasts. Almost all the red corpuscles are finely granular.

STRICTURE OF URETHRA.—197. M., 60. Stricture of membranous portion (bridle); hypertrophy of bladder and cystitis; vesiculæ seminales fibrosed. Kidneys 12½ ozs., normal. Liver 85 ozs., cirrhosed and fatty. Arteries atheromatous. Heart 18 ozs., hypertrophy of left ventricle; chronic aortic valvulitis.

273. M., 78. First inch of penile urethra stenosed and mucosa rigid and thickened; hypertrophy and sacculation of bladder; cystitis. Kidneys 8 ozs.; cortex of left much atrophied. Heart 12 ozs. Arteries atheromatous. Veins of left lower limb thrombosed with firm adherent clot, reaching about 2 inches above Poupart's ligament. Branch of pulmonary artery to right lower lobe thrombosed with similar clot. Pneumonia.

CYSTITIS.—191. M., 43. Ulceration of mucosa of membranous urethra; stenosis; hypertrophy and sacculation of bladder; some enlargement of prostate; cystitis; dilated tortuous ureters; nephrosis of both kidneys and considerable atrophy of left.

222. M., 55. Hypertrophy of bladder and cystitis; prostate, especially on left side, is indurated from diffuse infiltration with tough buff-coloured neoplasm; there is almost no enlargement of prostate. Left ureter, pelvis, and calices of left kidney are dilated and filled with pus. No enlarged lymphatic glands or secondary deposits. Microscopical examination of prostate shows an infiltration of prostatic tissue with epitheloid cells, the

nuclei of which are large and the cytoplasm tenuous. In many places the arrangement is distinctly gland-like, in others not. I am not convinced that this is an example of early cancer, but two other members of Morbid Growths Committee of Pathological Society took that view, one being of opinion that it was carcinoma, the other that it was duct cancer. The term I suggest is diffuse adenoma.

CALCULUS.—184. M., 37. Uric acid calculi in pelvis and ureters of both kidneys. Surgical wound in right loin; diffuse subperiteneal suppuration; peritonitis.

287. M., 42. Calculus in right ureter; large mass of fibrosis about right kidney, tunnelled up by fistulous passages, with opening in flank externally and internally into ascending colon; ureter and pelvis of kidney, which is atrophied, filled with pus. Left kidney 12 ozs.; surface granular; cortex large, yellow; consistence firm. Small arteries, especially the muscular, very atheromatous, but medium and large normal.

CHRONIC NEPHRITIS.—203. M., 20. Kidneys 13 ozs., contracting granular after acute nephritis. Heart 14 ozs., left ventricle hypertrophied.

239. M., 70. Kidneys 9 ozs., red, granular, cystic. Heart 15½ ozs., hypertrophy of left ventricle.

262. F., 55. Kidneys 8 ozs., granular, cystic. Heart 7½ ozs.

265. F., 36. Kidneys 5½ ozs., coarsely granular. Heart 12 ozs., hypertrophy of left ventricle. Uterus large, mucosa injected; soft, black clot, ½ oz., triangular in shape, lies in vagina. Ovaries indurated. Died during menstruation. Microscopical examination of uterus; no trace of outer half of mucosa, while the inner half or sub-mucosa, consisting of small spindle-shaped cells, in which uterine glands are frequent, is rather thick; the fallopian tubes present nothing specially noteworthy. (*See also* Ulcer of Stomach, 383.)

310. F., 32. Kidneys 7¾ ozs., granular. Heart, with adherent pericardium, 32 ozs. Recent pericarditis. Effusion into pleural sac with carnification of lung. Gastric and intestinal mucosa much pigmented. Lower half of small intestine in site of numerous scars and ulcerations; their shape is irregular, and they are mostly opposite mesenteric attachment; in size they

vary considerably; the ulcerations are shallow, and some are covered with a thin pellicle.

319. F., 38. Kidneys 2½ ozs., granular. Heart 13¼ ozs., hypertrophy of left ventricle. Skin peeling in flakes (erysipelas).

328. M., 49. Kidneys 6¼ ozs., granular. Heart 10½ ozs. Urate of soda in joints of both extremities.

334. F., 44. Kidneys 26 ozs., large, white. Heart 10½ ozs.

386. F., 39. Kidneys 5¾ ozs., granular. Heart 16½ ozs., hypertrophy of left ventricle. Chronic arteritis. Chronic gastric ulcer about middle of lesser curvature; stomach distended with soft black clot; melæna.

SARCOMA.—371. F., $\frac{11}{12}$. Sarcomatous mass occupying right half of abdomen; is soft and white, with cystic degeneration; the lower half of kidney looks healthy. Microscopically, a spindle-celled sarcoma.

DISEASES OF THE SUPRARENAL BODIES.

ADDISON'S.—178. M., 31. General slight bronzing of skin, but deep on scrotum; some pigmentation of oral mucosa. Tubercular fibro-caseous degeneration of suprarenal bodies, which are much enlarged. Some caseous masses in lungs.

DISEASES OF THE THYROID BODY.

254. F., 67. Tumour, size of orange, arising from thyroid: growth is white, firm, and fleshy; a few cervical glands are enlarged. Tracheotomy. Liver 52 ozs.; hydatid cyst of right lobe. Old gastric ulcer, size of shilling, about middle of lesser curvature.

DISEASES OF THE LYMPHATIC SYSTEM.

SARCOMA.—318. M., 40. Firm white growth of mediastinal glands, size of a cricket ball; presses on both main bronchi, both auricles, and œsophagus; has grown into walls of both auricles, and of left bronchus, and the lower lobe of right lung. Whole of right lung consolidated from pneumonia in various stages. Microscopically a sarcoma.

Diseases of the Organs of Locomotion.

Caries.—246. M., 41. Caries of 4th and 5th lumbar and 1st sacral vertebræ. Psoas abscess. 5th, 6th, 7th, 8th, and 9th left ribs have been resected in axillary line for empyema. Liver, spleen, stomach, and pancreas give amyloid reaction with iodine. Kidneys 7¾ ozs., granular; tubercular abscess in right.

Necrosis.—185. M., 32. Necrosis of 10th left rib and right clavicle; chronic periostitis of 10th and 11th ribs and of clavicle. Much yellow lymph and pus in left pleural sac, and the lung carnified. Bladder hypertrophied and slightly sacculated. Urethra from orifice for a distance of 2¼ inches is much stenosed, and the wall here is thickened and its surface granular. Streptococcus in pleural exudation.

4. F., 20. Necrosis of bodies of 3rd to 10th dorsal vertebræ; angular curvature from absorption of part of body of 9th; bones dry and hard. Left pleura much thickened, much yellow curdy lymph in sac; lung much shrunken. Recent pleuritis of right side. No caseation or tuberculosis in thoracic or abdominal viscera.

Sarcoma.—290. M., 49. Malignant growth from right innominate bone, growing upwards into spine, which is invaded from 3rd to 5th lumbar vertebræ, the body of the fourth being almost entirely absorbed. The aorta from the diaphragm upwards for 4½ ins. is completely occluded by firm, yellow, adherent clot. There is no evidence of disturbances of circulation or of collateral channels. Microscopically, the growth is a mixed-celled sarcoma; most of the cells are large. The clot in aorta is mostly fibrinous, but there are a few cells of sarcomatous appearance in places; there is no evidence of organisation, but much of degeneration.

381. M., 15. Malignant disease of femur, for which the limb had been amputated at hip-joint some months previously. Large, soft, whitish growth from inner aspect of right innominate bone occupies quite half of abdomen. Numerous deposits in lungs; the bronchus to right lower lobe is filled with growth. Microscopically, the neoplasm is a sarcoma with

spindle cells as basis. In places it is tough, strong, fibrous tissue, with myxomatous and hyaline degeneration here and there; in other places there are areas of trabeculæ infiltrated with lime salts, but there is no true bone, though in general arrangement there is some resemblance to cancellous tissue; for this the term pseudo-osseous would seem to meet the case.

Diseases of the Reproductive Organs.

Cancer of Breast.—296. F., 70. Spheroidal indurated mass of cancer size of walnut in left breast, with secondary deposits in liver, pleuræ, and bones. Carcinoma.

357. F., 69. Left breast absent; cancerous infiltration of both mammary regions as to skin and subjacent soft tissues. Recent pericarditis. Calcareous atheroma of arteries. Right kidney $\frac{1}{8}$ oz., in condition of simple atrophy; ureter patent throughout; left 5 ozs., normal. Atrophy with softening of right occipital lobe, and atrophy of right half of cerebellum.

Cystic Ovary.—370. F., 56. Large multilocular cysts of both ovaries, with secondary deposits in peritoneum. Chronic peritonitis. Microscopical examination of the peritoneal nodules shows fibrous tissue in which are tubules lined by hypothelium, which is in places columnar, in others cuboidal, and in others squamous. In the ovary the fibrous stroma is composed of long cells with large oval nuclei, and the cysts are lined by epithelioid or often globular cells with large round nuclei.

Operations and Surgical Diseases.

Hernia.—181. F., 57. Strangulated umbilical hernia, for which a piece of jejunum was resected. Peritonitis. Heart 19 ozs., hypertrophy of both ventricles. Kidneys $8\frac{1}{2}$ ozs., granular. Urate of soda deposit in joints of feet. Emphysema of lungs.

207. F., 59. Umbilical; strangulation of appendix epiploica. Peritoneum smooth and shiny.

313. F., 41. Coil of ileum strangulated in hole through mesentery. Peritonitis. Spleen $12\frac{1}{2}$ ozs., soft, dark; several caseating infarcts. Kidneys 7 ozs., granular. Heart $8\frac{1}{2}$ ozs.,

normal. Arteries atheromatous. Copious deposit of urate of soda in all joints of upper and lower extremities, bar shoulder joints.

Obstruction from Peritoneal Adhesions.

182. M., 18. Acute and chronic peritonitis. Volvulus of jejunum; to the coil the omentum is firmly adherent in two places, and, owing to the adhesion, the gut is much constricted as well as twisted.

215. M., 34. Ileum constricted about 2 feet above valve by omental adhesions. Peritonitis.

311. M., 15. Mesenteric glands much enlarged from tubercular caseous deposit. To this the lower end of omentum is adherent. Between the two a coil of small intestine has been strangulated. The coil is gangrenous in several places. Peritonitis.

320. M., 26. Constriction of ileum about 2 feet above valve by band from mesentery; at this point the lumen of gut is not more than one-third of an inch in diameter, but there is neither thickening nor ulceration of intestinal wall. Peritonitis.

359. F., 65. Obstruction from adhesion of tumour of right ovary to ileum just above valve. The tumour is solid, fleshy, white, and homogeneous.

Intussusception.—378. F., $\frac{5}{12}$. Intussusception of part of ileum and of colon into sigmoid flexure. The mass is 5 inches long. A number 10 catheter passes through it easily.

Acute Periostitis.—187. F., 11. Amputation of right thigh in lower third for infective periostitis of tibia. Acute periostitis of left clavicle. Both lungs bestudded with hæmorrhagic septic abscesses. Left middle ear filled with pus, the bone around necrosed, and the membrane perforated. (Staphylococcus.) Diffuse abscess in soft tissues about right shoulder.

Otitis.—186. F., 18. Necrosis of left petrous bone. Large abscess of left temporo-sphenoidal lobe. Right middle ear filled with pus, bone around tympanum necrosed and membrane perforated. The pus in abscess shows at least two kinds of bacteria,

(1) a diplococcus with capsule, (2) a smaller coccus in small chains.

214. M., 33. Double otitis media with perforation of membranes. Suppurative cerebrospinal meningitis.

338. M., 19. Right otitis media with sclerosis of bone around. Septic clot in lateral sinus and jugular vein. Septic abscesses in lungs and exudation in right pleural sac.

369. M., $4\frac{3}{12}$. Chronic otitis of both middle ears. Microcephalus idiot. Sclerosis of cortex of both parieto-occipital regions. Both middle fossæ of skull are very small and the bone rough and dark. Microscopical examination of cortex from rolandic region shows chronic and recent meningitis.

EXCISION OF TONGUE.—216. M., 59. Anterior two-thirds of tongue removed for cancer. Broncho-pneumonia.

ŒSOPHAGOTOMY.—238. M., 46. Operation for impacted tooth plate. Diffuse cellulitis of neck.

LITHOTOMY.—195. M., 43. Median lithotomy for vesical calculus. Hypertrophy of bladder; diffuse suppurative cystitis and urethritis. Impacted calculus in left ureter. Septic abscesses in kidneys. Chronic peritonitis. Left omental bubonocele. Adherent pericardium.

OPIUM POISONING.—179. M., 33. Stomach contracted; contains about 2 ounces of watery fluid in which are whitish flocculi; mucosa covered with a thin layer of mucus; of a bright pink hue from capillary injection. Masses of pigmented fibroid tubercles in upper lobes of both lungs. Vessels of pia mater full of dark blood.

HYDROCHLORIC ACID POISONING.—241. M., 36. Mucosa of œsophagus and stomach thickened, granular and ulcerated in places, the corrosive action being most marked in œsophagus. The œsophagus is of a dark plum colour, and the stomach yellow (bile staining). Extensive pneumonic consolidation of both lungs. Lived till the tenth day.

FRACTURE.—204. M., 53. Fracture of base of skull. Bruising of and hæmorrhage into cortex. Liver 69 ozs., very

fatty. Hydrocele of left tunica vaginalis; much cholesterin in fluid. Both inguinal canals patent.

361. M., 42. Fracture of base and vertex of skull; of spine at level of 4th dorsal vertebra; of 1st to 8th left ribs close to spine; of 1st and 2nd left ribs in front and of sternum.

212. F., 75. Fracture of 2nd to 11th left ribs and of 3rd to 7th right ribs. Lower lobe of left lung torn across with much hæmorrhage into pulmonary tissue and into pleural sac. Hour-glass contraction of stomach from extensive cicatrix of healed gastric ulcer.

233. M., 48. Fracture of 1st to 5th ribs on right side, and of 1st to 8th on left of sternum; of left half of lower jaw. Rupture of 2nd and 3rd intervertebral cartilages.

201. M., 56. Compound fracture of left femur at junction of middle with lower third. Fracture of right fibula part below head. Capsule of left knee joint ruptured.

345. F., 8. Simple fracture of right femur just below middle third. Diffuse subperitoneal hæmorrhage. Bruising of and hæmorrhage into right kidney, which is much swollen.

358. M., 71. Greenstick fracture of neck of left femur close to head; no shortening but slight eversion of limb. Firm, free clot, size of almond, in cavity of hip joint. Pneumonia.

264. M., 62. Pott's fracture of right leg. Rupture of internal lateral ligament; some blood in joint and cartilage of astragalus flaked off. Clot in veins of right lower extremity. Firm, free, cylindrical clot of the calibre of the femoral vein, about 12 in. long, extends from right ventricle into left pulmonary artery. Branch of pulmonary artery to right lower lobe firmly plugged by granular decolorised adherent clot. Lungs much engorged. Hernia of sigmoid flexure into left inguinal canal; gut adherent.

339. M., 33. Compound fracture of both bones of right leg at beginning of lower third; soft tissues around fractured ends are much disorganised and the ends immersed in pus; diffuse suppuration of soft tissues about right shoulder. Fracture of middle and posterior fossæ of right side of base of skull. Suppurative pachy- and lepto-meningitis. Laceration of cortex in frontal and temporo-sphenoidal regions. Right suppurative otitis media with perforation of membrane; the bone around is

soft, red, and disintegrating; only one ossicle, the malleus, was found.

WOUND OF HEART.—188. M., 33. Punctured wound of right ventricle; thin sanious fluid in pericardial sac; wound of pericardium healed. Upper lobes of lungs fibrosed and contracted. Left kidney reduced to thick-walled sac filled with thick curdy pus; left ureter blocked just outside bladder. Much fibrosis around bladder, especially at base, wherein the prostate and vesiculæ are involved. Indurative phimosis with central ulceration; urethra thickened and puckered at anterior part of membranous portion. Both epididymides are fibrosed. Left femoral epiplocele (adherent).

ASPHYXIA.—208, 245, 377. Infants brought in dead from overlying.

UNCLASSIFIED.—250. F., 19. Skin dry, harsh, thick, the hair follicles stick up all over, linear cracking of epidermis. Lungs œdematous and much engorged. No other striking morbid appearances. Was admitted for headache, emaciation, and drowsiness. Microscopical examination of spleen, 7¾ ozs., showed considerable deviation from the normal; the location of the malpighians was barely discernible, and there is general thickening of the splenic parenchyma; the epithelium of the kidneys is finely granular (cloudy swelling from high temperature).

293. M., 34. Lungs engorged and much pigmented. Heart muscle soft; no other striking morbid appearances. Microscopical examination of liver showed cardiac cirrhosis, *i.e.*, degeneration of the hepatic cells around the central veins; most of the liver cells are degenerated. This would indicate a feeble and dilated right heart.

302. M., 54. Brought in dead. Jaundice. Liver 66¼ ozs., smooth, yellow, firm, almost to induration; no evidence of cirrhosis. Microscopical examination showed advanced degeneration of all the liver cells. Kidneys 11 ozs., slightly granular. Examination of contents of bladder, which was opened above pubes, and the contents (turbid, yellow, about 2 drachms) pipetted off showed crowds of spermatozoa, numerous oil

globules, epithelium of all sorts, but no leucin or tyrosin. For very similar case see Icterus gravis, 317.

For other Surgical cases see under:—

Tetanus, 3.
Tuberculosis, 391.
Empyema, 389, 399.
Ulcer of stomach, 383.
Cancer of œsophagus, 379.
Vesical calculus, 184.

Diseases of organs of locomotion:—

Caries, 246.
Necrosis, 185, 4.
Sarcoma, 290, 381.

PATHOLOGICAL SPECIMENS RECENTLY ADDED TO THE MUSEUM.

By E. CANNY RYALL,
Curator of the Museum.

SERIES V.—RICKETS.

13A. The extremities of the ribs and costal cartilages together with the sternum, from a rickety child. The ends of the ribs at the junction with the cartilages present a sudden bead-like enlargement, which is much more marked on the inner than on the outer aspect. On the right side the structures intervening between the ribs and cartilages have been removed showing the beading also involving the upper and lower borders.

SERIES IX.—INFLAMMATORY CHANGES IN BONES.

Caries of the Spine.

178D. A vertical section of the lumbar, sacral, and coccygeal spine, from a case of tubercular caries in which suppuration occurred. The ulceration has extensively attacked the bodies of the fourth and fifth lumbar, and slightly the under surface of the third lumbar, and upper surface of the first sacral vertebræ. The intervening discs are also involved, the fourth lumbar being nearly destroyed. Apertures are seen on the anterior and lateral aspects of the bodies through which the pus escaped.

SERIES XIII.—TUMOURS OF BONE.

Sarcomata.

263A. The right humerus, scapula, and surrounding soft parts removed by operation from a man. The humerus has

been sawn through in the lower third, but sufficient skin has been left to show the shape of the flaps cut at the operation. The whole of the upper part of the shoulder is occupied by a large cystic growth, which has shrunk considerably from its immersion in spirit. The axillary vessels and nerves are partially involved by this growth. An incision has been made into the mass and the edges separated by green glass-rod. Red glass-rod has been inserted into the axillary and suprascapular vessels and under the subscapular artery. On the posterior superior surface of the scapula an irregular triangular piece of skin is preserved showing the scars of former operations.

Clinical History.—J. M. C., æt. 21, native of New Zealand. In April, 1889, the recoil of a gun bruised his right shoulder over and above the clavicle, without injuring the skin. Some months later a soft swelling formed at the seat of injury. In 1891 this was incised and oily fluid escaped. In February, 1892, a large opening was made under chloroform and the clavicle scraped. Oily fluid but never pus escaped. The opening and scraping were repeated several times between February and October, 1893, the wounds healing rapidly. On October 1st, 1893, the clavicle was removed and some cysts drained. One month after the swelling was as big as ever. In March, 1894, three openings were made and drainage tubes inserted. His health having by this time begun to suffer, he was told that nothing more could be done and that he might not live 3 weeks. He came to England, the voyage greatly improving him, and consulted Dr. Frederick Monat, Mr. Macnamara, and Mr. Spencer, by whom his condition was found to be as follows:— Covering the right shoulder was a tumour which extended from the 3rd rib in the anterior nipple line to the scapular spine behind, and from the inner border of the sterno-mastoid muscle to the point of the shoulder. It stood up from the shoulder to the level of the angle of the jaw, and caused a bulging in the axilla below. Numerous scars were visible on the dome of the tumour. Over the prominent part and among the scars the skin was adherent, but at the margin it was freely movable. The tumour was fixed to the shoulder, but seemed to move with the latter over the deep structures of the neck. The circulation in the arm was quite natural. On consultation it was decided that the growth was an encapsuled cystic sarcoma of local malignancy only. On September 14th, 1894, the whole of the upper extremity was removed. The patient made a good recovery, and left for New Zealand early in December.

Microscopical examination.—The intercystic solid material has the appearance of lymphatic gland tissue. The cells are similar to large lymph corpuscles, consisting mainly of a nucleus with a very narrow zone of protoplasm around, and containing one, two, or three nucleoli. The delicate stroma between the cells is similar to retiform connective tissue.

For details of the operation see Clinical Society's Transactions, vol. xxviii.

Presented by Mr. SPENCER.

SERIES XI.—INJURIES AND DISEASES OF THE BONES.

Epiphysitis.

222B. Portion of the head of a right femur denuded of its cartilage, removed from a patient suffering from acute infective epiphysitis.

History.—H. S., æt. 4 years and 10 months, was admitted into Westminster Hospital, under the care of Mr. de Santi, August 7th, 1896. He had acute pain in the right hip joint with swelling especially in front. Temperature was about 102—103°. Patient was quite well up to 4 days before admission. There was no history of injury. An exploratory incision anteriorly was made down to the joint but no pus found; later a second exploratory operation was performed, pus found and the joint opened. The head of the femur was found diseased, the encrusting cartilage being eroded, and the ligamentum teres entirely destroyed. The head of the bone was excised and the boy made an excellent recovery. Shortly after admission a large superficial abscess pointed over the left hip, which was opened, drained, and soon healed up.

Presented by Mr. DE SANTI.

SERIES XXI.—DISEASES OF THE TONGUE.

Epithelioma.

412B. The left half of a tongue removed for epithelioma. On the middle third of its left margin is an oval-shaped ulcer with everted edges and an indurated base. It has the structure microscopically of a squamous epithelioma.

History.—Wm. H., æt. 79, was admitted into Westminster Hospital in September, 1896, under the care of Mr. de Santi, with a small ulcer on left side of tongue. The growth had been in existence about 2 months, and had caused the patient no inconvenience. There was a little fulness in the submaxillary region, but no distinct glandular enlargement. The whole of the submaxillary, sublingual, and adjacent glands of the left side of the neck in the digastric triangle were freely removed, the left lingual artery tied, and the left half of the tongue removed with scissors. The patient made a good recovery, and when seen 4 months later there was no recurrence in the tongue or glands of the neck.

Presented by Mr. DE SANTI.

SERIES XXXI.—ORGANS OF GENERATION DURING PREGNANCY.

561. Gravid uterus laid open on its anterior surface showing fœtus within and thickness of its wall.

562. Uterus eight hours after delivery. Death occurred from convulsions in the eighth month of pregnancy.

SERIES XXX.—DISEASES OF THE GALL-BLADDER AND BILE-DUCTS.

Gall-stones and their effects.

572B. An oval calculus of pure cholesterine measuring one and a quarter inches in length, and two and a half inches in circumference, removed from the gall-bladder of a female, aged 60, who died from pneumonia. Its surface is rough, covered with glittering cholesterine crystals, and has a dark and opaque coating at its upper extremity. When removed it was almost translucent, with a pale greenish-yellow reflex.

Presented by Dr. HALL.

SERIES XXXVII.—INJURIES AND DISEASES OF THE VEINS.

Phleboliths.

715. Phleboliths removed from the prostatic veins. They are almost round, of a yellowish-white colour, and vary in size from a pin's head to a small pea.

SERIES XLI.—INJURIES AND DISEASES OF THE KIDNEYS.

Stones from the kidneys.

831B. An irregular calculus composed of uric acid removed from the pelvis of the kidney. It measures two inches in length and four in circumference; is of a brownish colour, and presents several bosses on its surface corresponding with the calyces.

Presented by Mr. E. CANNY RYALL.

SERIES XLII.—INJURIES AND DISEASES OF THE URINARY BLADDER.

Rupture.

836B. The bladder and lower part of the rectum of a boy aged 12. The bladder is opened from in front, the rectum from behind. There is a narrow perforation extending from the rectum into the base of the bladder, which also has a tear in its fundus extending through its peritoneal covering. A white glass rod has been passed upwards and forwards through both the wounds.

History.—S. G., æt. 12, not having micturated since 6 a.m. on January 28th, 1896; was at 5 p.m. that day half sitting on a smooth ended stick, when he slipped, and the stick ran into him. He pulled it out and went home. He slept part of that night and was not seen by a doctor till 5 p.m. next day, when he was found to be obviously suffering from peritonitis in the lower abdomen, and was very collapsed. There was only a slight excoriation to be seen about the margin of the anus, and rectal examination revealed nothing definite. The catheter drew off about an ounce of albuminous urine. Seen in consultation at 9 p.m., the bladder was injected with 6 ounces of boracic lotion, of which only five returned. It was therefore determined to open the abdomen and suture the bladder, but this the father refused to permit, and the boy died at 2 a.m. next morning.

Post-mortem.—The above specimen was found and extensive semi-purulent peritonitis. There was only a comparatively small quantity of free fluid.

Presented by Mr. PATON.

SERIES L.—DISEASES OF THE UTERUS.

Membranous Dysmenorrhœa.

1064A. Three portions of uterine mucous membrane from a case of membranous dysmenorrhœa.

History.—C. R., æt. 29, married five years. Catamenia appeared for the first time when she was 13 years old. It continued quite regular and without difficulty or any membrane until she married in 1890. From April to June, 1895, she had amenorrhœa, and in June passed an entire ovum of about 2 months. Since then she has been quite regular, but the next period after the miscarriage she passed a membrane much like this specimen, only not so large. Ever since she has continued to pass a membrane at the period except on two consecutive occasions. Her account of what takes place at the time is unusual. It is as follows:—The period lasts 3 to 4 days. It

begins with severe pain in the sacrum, and in the lower part of the abdomen, followed by hæmorrhage for 3 or 4 days. Finally the membrane is passed and catamenia ceases. This specimen was brought up by the patient on her first visit, and appeared to be almost a complete cast of the uterus. Bimanually the fundus was slightly enlarged, and the ovary on the right side tender.

Presented by Dr. POLLOCK.

SERIES LVIII.—DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUES.

Sarcomata.

1245A. A right leg. On the anterior aspect of its lower third is a large exuberant growth partially occupying the site of an old chronic ulcer. The growth is oval in shape, its left margin being continuous with the skin, and its right merging into the ulcerated tissue. It is three and a half inches in length, two inches in breadth, and projects an inch and a half above the skin. Its cut surface is of a brownish-grey colour, and microscopically has the structure of a round-celled sarcoma. The surrounding skin is pigmented.

History.—Hannah R., æt. 48, was admitted into Westminster Hospital in August, 1896, under the care of Mr. de Santi, suffering from a growth on the right leg. For 6 weeks previous to admission the neoplasm had grown very rapidly; altogether it had been noticed about 4 months. There was no glandular enlargement. The limb was removed at the knee joint, the patient made a speedy recovery, and was in excellent health in December, 1896.

Presented by Mr. DE SANTI.

UNITED SPORTS' CLUB.

THE Westminster Hospital United Sports' Club consists at present of the Rugby Football, Cricket, and Athletic Clubs, united in their management. The amalgamation scheme has been in force now for over three years, and we must congratulate its originators on the successful way in which it has answered, especially with regard to the arrangement by which each new man on entering pays a subscription of £2 2*s.*, instead of contributing to each Club separately. This has been found very convenient by those who do not approve of sports, for by simply refusing once and for all to pay the subscription they are saved much worry and inconvenience by importunate Secretaries. Let us now briefly discuss the doings of the various branches of sport. The Rugby Football Club has kept up its average well. Last season, 1895-6, we were only beaten once. In the Cup Tie we had to meet King's College Hospital in the second round, and no doubt success would have crowned our efforts, but owing to unforeseen circumstances that meeting did not take place. This year Mr. Hulseberg was elected Secretary in place of Mr. Ereaut. At the time of writing only the first match has been played, in which the Hospital beat University College School by 1 try to nil.

In the prospectus of the Medical School mention is made of a Swimming Club. This branch unfortunately no longer exists except on paper. Its life was brief but brilliant. We possessed amongst our members one swimmer of exceptional ability, F. C. Dudley, and around him the Club was formed. He with three others comprised the team that was victorious in the United Hospitals' Swimming Competition; two of that team, including Dudley himself, are now in Africa, and one at Cambridge, hence the sudden collapse of what had promised to be the most successful offshoot of the amalgamation scheme.

With regard to other branches of sports, the Athletic and Cricket Clubs are both in a flourishing condition at present.

The Annual Athletic Meeting was held this year at Stamford Bridge, and favoured by fine weather and a good attendance, passed off in a way gratifying to the hearts of the energetic Secretaries, Messrs. Scott and MacLeod. Here let me record a most hearty vote of thanks to all those members of the Staff and others who presented prizes, to the Officials of the meeting, and last, but by no means least, to Mrs. Tubby for her kindness in distributing the laurels at the close of the proceedings. The times of the various events bear favourable comparison with those of other Hospitals, but in the Inter-hospital competition held shortly afterwards, third place in the 100 yards was the nearest we could get to the post of honour. Next year we hope to send up a more representative team. Prowess in athletics is merely a question of training, and there is no reason why Westminster should not turn out as good runners as any of the larger hospitals.

In the cricket field we manage to hold our own, and have each season been able to produce a fairly good eleven for the Cup Tie, but we have been somewhat unlucky. Last year we had to meet Guy's, and this summer were drawn against St. Thomas's. On each occasion we sustained defeat, which is perhaps natural when the size of these hospitals is taken into account; however, disgrace was not our portion, and after all the great thing is to keep up a regularly playing eleven throughout the season. The result of the Cup Tie is of smaller importance.

But for cricket especially, and in a lesser degree for football and athletic sports, a ground to practise on is essential. This it is somewhat hard to obtain conveniently near London, but until this difficulty is surmounted we cannot hope to compete with other clubs who are more fortunate in possessing suitable training grounds. Next year we hope to start a Lawn Tennis Club, as there are several good players at the Hospital who do not indulge in other games; the question of numbers, which affects other branches of sport, does not concern lawn tennis, and therefore this new enterprise should be successful. But for tennis again a ground is a *sine quâ non.*

This subject brings us to the financial question. The funds are at present, the Treasurer informs me, at a low ebb, the balance having gradually decreased for the last 2 or 3 years.

To keep the Club on a firm basis we must have an annual income of at least £40, the average expenditure for the past 3 years being roughly:—

For Cricket	...	...	£6 per annum.
„ Football	...	...	6 „
„ Sports	...	...	20 „

The expenses have been kept as low as possible, but the subscriptions from students have not been sufficient even to pay one-third of our debts, our chief income being derived from the contributions of the Staff.

This is obviously wrong; there is a lack of enthusiasm and *esprit de corps* among the present generation. It has not yet dawned upon them that the Club is for their benefit, and must be supported by each individual. If men will not subscribe voluntarily it will be better to add the amount to the ordinary composition fees, or rather make it payable on entry to the school authorities. This matter is now the subject of enquiry by a Sub-Committee of the School of Medicine Committee, and we may hope for a satisfactory solution of the difficulty.

The payment of this subscription by all would certainly tend to produce better cricket and football teams, and better contested sports, as every one would then feel that he had an interest in the Club, instead of some being actually in opposition to it.

In conclusion, let me warmly thank those members of the Staff who have the welfare of the Club at heart, for the unselfish support which they have always extended to us in the hour of need; we are especially grateful to Dr. Donkin, last year's President, to Mr. A. H. Tubby, his able successor, and to Dr. Wills, who was unanimously re-elected Treasurer at the last General Meeting, and who has performed his somewhat arduous task with energy and zeal.

GUY H. COLTART,
Hon. Secretary.

1*st January*, 1897.

THE GUTHRIE SOCIETY.

1894-95.

DURING the season only six meetings of the Society were held, one having been postponed owing to the death of Dr. Sturges, another on account of the closing of the Hospital.

The following is a list of the meetings :—

October 11th: Annual Smoking Concert.

December 13th: Clinical evening. The cases exhibited were as follows :—

Charcot's disease of knee	Mr. de Santi.
Spina bifida	Mr. de Santi.
Ventral hernia	Mr. de Santi.
Syphilitic disease of elbow	Mr. de Santi.
Cretin	Mr. Towne.
Cardiac mitral murmur	Mr. Kennard.
Pulmonary phthisis	Mr. Kennard.
A tattooing case	Mr. Evans.

January 10th: "Diphtheria, and its treatment by immunised serum," Dr. Blaxall; "The analogy of certain surgical diseases in the horse and man," Mr. Thos. Bond.

February 7th: "Birds' eggs and nests," by Mr. Stonham, who illustrated his remarks by the aid of his excellent collection of British and Foreign birds' eggs.

March 7th: Debate—"That the qualification for, and the practice of Medicine, should be under the control of the State." Proposed by Mr. Mills. The two questions involved were put to the meeting separately, the first being carried, the second negatived.

May 9th: "Hypnotism," Mr. de Santi.

July 12th: Annual General Meeting.

An Extraordinary General Meeting was held in November, when the rules of the Society were revised, the chief alteration being an increase in the number of the Committee, which was

increased to six, the three senior members to retire annually. Rules were also drawn up for the formation of a Paper Club.

At a later meeting it was decided to institute an Annual Lecture to be delivered before the Society by a gentleman chosen by the Committee, on a subject approved by them; the lecture to be entitled "The Sturges Lecture," in commemoration of the late Ex-President, to whose efforts the existence of the Society is mainly due.

Six new members were admitted to the Society during the year.

OFFICERS 1894-95.

President ... ... Mr. THOMAS BOND, B.S., F.R.C.S.
Vice-President ... „ H. H. MILLS, M.R.C.S., L.R.C.P.
Hon. Treasurer ... „ J. M. G. SWAINSON.
Hon. Secretary ... „ G. L. PARSONS.

Committee.

Mr. W. H. GOSSAGE, M.R.C.S., L.R.C.P.
„ ERIC MACNAMARA, B.A.
„ F. K. WILSON.
„ JOSEPH NELSON.
„ A. T. WHITE.

Hon. Librarian ... ... Mr. J. G. SCOTT.

1895-96.

Six meetings were held during the season, two having fallen through owing to the inability of the gentlemen who had promised to read papers to do so on the appointed dates. The meetings were as follows:—

October 17th: Annual Smoking Concert.

November 14th: "The origin of mammalian teeth," Dr. Tims.

December 12th: Sturges Lecture. "Duties and difficulties of medical practice," Dr. Donkin.

January 9th: "Prevention and cure of sea-sickness," Mr. Nitch Smith.

May 14th: "The Rontgen rays," Dr. Dupré. Several photographs were shown, and the use of Crookes' tube was demonstrated.

June 18th: Clinical evening. The following cases were shown:—

Osteo-arthritis	Dr. Hall.
Osteitis deformans	Dr. Hall.
Fractured jaw	Mr. Thos. Bond.
Progressive muscular atrophy ...	Dr. Gossage.
Lobster-claw deformity of hands ...	Mr. Paton.
Facial paralysis	Mr. Nitch Smith.
Extensive heart disease in a child ...	Mr. Nitch Smith.
Obscure lung disease	Mr. Nitch Smith.

July 16th: Annual General Meeting. At this meeting it was decided that in future there should be two Secretaries, instead of one.

Nine new members have been admitted during the season.

Four daily and four weekly papers have been provided by the Paper Club for use in the Smoking Room at the Medical School.

OFFICERS 1895-96.

President ... ... Dr. POTTER.
Vice-President ... ... Dr. GOSSAGE.
Hon. Treasurer ... ... Mr. J. M. G. SWAINSON.
Hon. Secretary ... ... Mr. H. C. BARLOW.

Committee.

Mr. F. K. WILSON.
„ J. G. SCOTT.
„ H. H. CHEESMAN.
„ H. M. CADE.
„ F. F. BOND.
„ R. N. WATSON.

Hon. Librarian... ... ... Mr. H. M. CADE.

G. L. PARSONS,
FRANK F. BOND,
Hon. Secs.

January 7th, 1897.

WESTMINSTER HOSPITAL AND SCHOOL.

THIS Hospital owes its origin to a meeting which was held at St. Dunstan's Coffee House, on the 14th January, 1715, and first opened its doors at a small house in Birdcage Walk, under the name of the "Publick Infirmary for the Sick and Needy." At this time the only hospitals which existed for the medical and surgical relief of the sick poor were St. Bartholomew's and St. Thomas's, which were both established and carried on by the religious houses of their respective neighbourhoods, and created Royal Hospitals soon after the suppression of the monasteries in 1537.

Westminster Hospital is remarkable as being the first in London which was founded by the voluntary contributions of the public. Guy's Hospital, founded by one individual, was not established until a few years later. After nearly five years' work in Birdcage Walk, the infirmary was converted into a hospital, situate in Petty France, and having accommodation for 30 in-patients. So rapidly did its usefulness develop, that in 1724, having been in existence for little more than 9 years, it opened its wards in Chapel Street with 60 beds. At this time, Cheselden, the teacher of John Hunter, became one of its surgeons; a post which he held for 15 years. Another 9 years passed, and in 1733 the hospital was removed to a still larger building in James Street, where it remained for 101 years. This removal, however, did not take place without a strong protest on the part of a large body of the Governors, who preferred a house near Hyde Park Corner, called Lanesborough House, to which they finally seceded with a portion of the staff, and established the present St. George's Hospital.

In 1834 the patients were removed into the present building, and a Medical School was established in Westminster in the same year; but it was not until 1849 that the School became connected with the Hospital.

Alterations and improvements, including a Chapel and an extensive Out-Patient Department, have largely added to the resources and efficiency of the Hospital, which at present contains upwards of 200 beds, including accommodation for special classes of disease. The old Chapel has been converted into a ward for children.

There are separate departments for diseases of the eye, of the ear, of the skin, of the teeth, of the throat and nose, for those peculiar to women, and for orthopædic practice.

In 1884 a site containing 5,900 square feet was purchased in Caxton Street, close to the Westminster Town Hall, and in October of the same year the Governors of the Hospital accepted a contract for £8,168 for the erection of school buildings from plans drawn up by Mr. Stephen Salter, F.R.I.B.A. The foundation-stone was laid by His Grace the Duke of Westminster on February 28th, 1885, and the building was opened on October 1st in the same year.

Communications respecting the Medical School should be addressed to the Dean, Medical School, Caxton Street, S.W., from whom all particulars may be obtained on application, either personally or by letter. Information may also be obtained at any time from the Secretary of the Medical School, from the Secretary of the Hospital, or from any of the lecturers.

The Dean will be pleased to give aid to parents and guardians in the selection of places of residence for students.

FEES FOR GENERAL STUDENTS.

A.—The Composition Fees for the entire course of Hospital Practice and Lectures required for the Membership of the Royal College of Surgeons of England, and for the Licences of the Royal College of Physicans, and of the Society of Apothecaries of London, may be paid in one of three ways.

1. In *one* payment on Entrance, 100 Guineas. 2. In *two* payments of 55 Guineas each, on Entrance and at the commencement of the Second Winter Session respectively. 3. In *six* payments, at the commencement of each of the first Six Sessions, 25 Guineas each Winter Session and 15 Guineas each Summer Session. In the case of Students, other than holders

of Scholarships, not requiring all the subjects of the first examination of the Conjoint Board, special deduction will be made on application to the Treasurer.

B.—Members of the Universities of Oxford, Cambridge, Durham, and others, who have completed one year of Medical Study at an University or other Medical School, and desire to enter for the Hospital Practice and Lectures required by those Universities, and by the Colleges of Physicians and Surgeons, may pay their Fees in one of three ways, viz.:—

1. In *one* payment of 75 Guineas on Entrance. 2. In *two* payments of 40 Guineas each, at the commencement of the First and Second Sessions of attendance. 3. In *three* payments of 30 Guineas each, at the commencement of the First, Second, and Third Sessions respectively.

C.—Students who have passed their first M.B. Examination, or who have completed their Anatomical and Physiological studies, and desire to enter for the full period of Hospital Practice and the Lectures on the practical subjects only, may pay their Fees in one of two ways, viz.:—

1. In *one* payment of 50 Guineas, on Entrance. 2. In *two* payments of 30 Guineas each, at the commencement of their First and Second Sessions.

These Fees entitle the Student to an Out-Patient and In-Patient Dressership and Clerkship in rotation, and to the use of the Library.

British, Colonial, and Foreign qualified Practitioners may be admitted to the Hospital Practice and Lectures on payment of a fee of £12 12s.

UNIVERSITY OF LONDON EXAMINATIONS.

A University Calendar will be found in the Library.

Special Classes for Students preparing for the Preliminary Scientific and Intermediate (M.B.) Examinations of the University of London.

Classes will be held in the subjects of the Preliminary Scientific (M.B.) Examination, *see* Special Time Table. The total fees for these will be 24 Guineas, half of which will be allowed on entering as a general Student. Students are urged

to commence in October for the July (Honours) Examination. Special arrangements are made for that in January. Dr. Tims will begin a Class in Advanced Zoology and Botany for the B.Sc. in October.

Special Classes for the Intermediate M.B., and for the First F.R.C.S. Examinations will be held at times to be arranged. For these an extra fee of 10 Guineas will be charged for the former and 7 Guineas for the latter.

Any of the above Classes are open to other than Students of the School, on conditions to be learned on application to the Dean.

FEES FOR DENTAL STUDENTS.

The Fees for the *general* Surgical Practice and Lectures required for the Dental Diploma of the Royal College of Surgeons may be paid in one of two ways, viz.:—

1. In *one* payment on Entrance, £50. 2. In *two* payments of £27 10s. each, to be made at the Commencement of each Academical year. A Scholarship (*see* p. 12, v. vi.), value £20, is offered annually for competition to commencing Dental Students. These payments include the Library fee.

Students who become general Dental Students, as above, may enter for the special practice and lectures at the Dental Hospital of London, in Leicester Square, within easy reach of the Hospital, or at the National Dental Hospital, Great Portland Street, for the study of Practical Dentistry. Lectures are delivered on Metallurgy, Dental Mechanics, Dental Surgery and Pathology, and Dental Anatomy and Physiology. The courses required for the Dental License of the College of Surgeons are one course of Metallurgy, and two of each of the other three; the fee for which, including Dental practice, is 30 Guineas at the former Hospital, and 24 Guineas at the latter.

REGULATIONS CONCERNING THE SCHOLARSHIPS AND PRIZES.

1. The successful Candidates must be or will be required to become full general students of the Westminster Hospital

School of Medicine. The holders of the Oxford and Cambridge Scholarship are required to become Full Students from the beginning of their second or third year.

2. No Scholarship will be awarded unless sufficient merit be shown in the Examinations.

3. The holder of one Entrance Scholarship is not eligible to compete for any other Entrance Scholarship.

4. Candidates must be under 25 years of age.

SCHOLARSHIPS AND PRIZES.

I. AN ENTRANCE SCHOLARSHIP—which is designated the "GUTHRIE"—of the value of Sixty Pounds, the composition fee being reduced by this amount, will be offered for competition in each year to gentlemen who have entered, or are about to enter, as First Year's Students, at the Westminster Hospital Medical School in the Winter Session. The subjects of the Examination, which will be by written papers, are Latin, Mathematics, Experimental Physics, and Chemistry, and either Greek, French, or German.

II. AN ENTRANCE SCHOLARSHIP of the value of Forty Pounds, the composition fee being reduced by this amount, will be annually offered for competition to gentlemen who have entered, or are about to enter, as First Year's Students at the Westminster Hospital Medical School in the Winter Session. The subjects of the Examinations are the same as above.

III. AN ENTRANCE SCHOLARSHIP, of the value of Twenty Pounds, the fees payable being reduced by this amount, will be annually offered for competition to gentlemen who have entered, or are about to enter, as First Year's DENTAL STUDENTS at the Westminster Hospital Medical School in the Winter Session. The subjects of the Examinations are the same as above.

IV. A FREE PRESENTATION, open to pupils of the Epsom Medical College.

V. AN OXFORD AND CAMBRIDGE SCHOLARSHIP of the value of Forty Pounds, the fees payable being reduced by this amount,

will be offered for competition in each year to members of the University of Oxford or Cambridge, who are about to join the Westminster Hospital Medical School in the Winter Session. The subjects are Anatomy and Physiology, including Histology.

VI. A NATURAL SCIENCE ENTRANCE SCHOLARSHIP of the value of Sixty Pounds, the composition fee being reduced by this amount, will be offered for competition in each year at the beginning of the Summer Session, to gentlemen who have entered, or are about to enter, as First Year's Students at the Westminster Hospital Medical School. The subjects of the Examination, and the minimum standard of excellence required, will be the same as those of the Preliminary Scientific Examination of the University of London.

VII. AN ENTRANCE SCHOLARSHIP — THE "GOVERNORS'"— of the value of Forty Pounds, the composition fee being reduced by this amount, will be offered for competition in each year to gentlemen who are about to enter as First Year's Students at the Westminster Hospital Medical School in the Summer Session. The subjects of the Examination are Chemistry (Inorganic and Organic) and Experimental Physics according to the synopsis of the Conjoint Examining Board, which can be obtained at the Examination Hall, Victoria Embankment.

VIII. THE TREASURERS' PRIZE, an Exhibition, of the value of Ten Guineas, for general proficiency in Anatomy, Physiology or Biology, and Chemistry, given by the Treasurers of the Hospital and the Treasurer of the Medical School, for competition amongst First Year's men.

IX. THE PRESIDENT'S PRIZE, of the value of Twenty Guineas, a Scholarship in Anatomy, Physiology and Histology, given by His Grace the Duke of Westminster, President of the Hospital, to be competed for by Students of the Second Year.

The Examination for VIII. and IX. will be held both at Christmas and at the end of the Winter Session.

X. THE STURGES PRIZE IN CLINICAL MEDICINE.—The proceeds of the residue of the sum subscribed in memory of the late Dr. Sturges will be added to the sum of Five Pounds.

XI. THE CLINICAL SURGERY PRIZE, value Five Pounds.

Prizes X. and XI., consisting of Books or Instruments, may be competed for after the completion of the Fourth Winter Session, by Students who have entered for the full period of Hospital Practice. Candidates must send in, *on or before* the 30th of March, written reports with comments of not less than Six, and not more than Twelve, Medical or Surgical Cases respectively, taken in the Wards of the Hospital during the preceding twelve months. The cases reported on must be those the Candidate has had allotted to him whilst acting as Clinical Clerk or Dresser. In May the Candidates must be prepared to write a Commentary on such case or cases as may be selected by the Physicians or Surgeons, and be examined also at the bedside, and in the Post-mortem Room.

XII. THE FREDERICK BIRD MEDAL AND PRIZE, of the value of Fourteen Pounds, will be offered for competition to Students who have completed their Fourth Winter Session at the Westminster Hospital School of Medicine. The Examination will be by written papers and *vivâ voce* in the following subjects:—Obstetric Medicine, including Midwifery and Diseases of Women and New-born Children, and one paper in Medicine and Pathology.

XIII. THE CHADWICK PRIZE.—In 1862 the late Mrs. Chadwick endowed the School with the interest of £700 Consols, in memory of her deceased husband, James Chadwick, Esq., a Governor of the Hospital. This Prize, of the value of Twenty Guineas in Books or Instruments, is offered for competition at the end of each Winter Session, and may be awarded to the most meritorious Student (or Students) of *any* year not exceeding the fifth, provided that such Student has been fully entered to the Lectures and Hospital Practice of this Hospital, that his attendance and general conduct have been in every respect satisfactory, and that, at the time of competing, no qualification has been obtained from any of the Licensing bodies. The Examination will be by written papers in Medicine and Surgery, including Pathology, applied Anatomy and Physiology.

Students who intend to compete for the Frederick Bird and

Chadwick Prizes must send in their names to the Dean on or before March 1st.

XIV. THE FISH PRIZE.—This Prize of the value of Twenty Pounds given by Mrs. Charles Fish, in memory of her deceased husband, Charles Fish, Esq., a Governor of the Hospital, will be awarded to the Student who exhibits the greatest proficiency in Pathology. A Candidate must have been fully entered to the Lectures and Hospital Practice of this Hospital, his attendance and general conduct in every respect must have been satisfactory, and he must not have obtained any qualification to practice. The Examination, which will take place at the end of the Summer Session, will be by written papers in Pathology, and *vivâ voce* Examinations in the Post-mortem Room, on the Museum Specimens and on Microscopic Specimens, including the methods of their preparation.

A week's notice of intention to compete must be sent to the Dean.

XV. CLASS PRIZES AND CERTIFICATES.—The Examinations in Medicine and Surgery are held at the end of the Winter Session on the subjects both of the General and also of the Special Lectures.

The Examinations in Midwifery, Forensic Medicine, Histology, Biology, Practical Pharmacy, Practical Chemistry, and Physics, are held at the end of the Summer Session. A regular attendance as well as a satisfactory Standard of Merit in the Examination are the necessary qualifications.

Besides the above Prizes, all the Resident Medical Appointments are open to the Students without additional fee.

HOSPITAL PRACTICE.

THE IN-PATIENTS are seen by the Physicians and Surgeons daily, when Clinical instruction is given in the Wards, and also by means of lectures and examinations upon the cases.

CLINICAL LECTURES are given weekly in the Clinical Lecture

Room at the Hospital, before or after the visit, by the Physicians and Surgeons, according to the following table:—

Dr. ALLCHIN, Dr. DONKIN, Dr. HALL — In rotation: On Wednesdays, during the Winter and Summer Sessions.
Mr. MACNAMARA, on Wednesdays, in January, February, March.
Mr. BOND, on Fridays, in May, June, July.
Mr. STONHAM, on Thursdays, in October, November, December.
Dr. POTTER, on Fridays, throughout the year.

A special notice is posted before each Lecture.

THE OUT-PATIENTS are seen daily at 1.30 p.m. by the Assistant Physicians and the Assistant Surgeons. Students are required to attend in the Out-Patient Department before entering on duties in the Wards.

OBSTETRIC DEPARTMENT.—The Obstetric Physician, Dr. Potter, attends on Tuesdays and Fridays, at 2 p.m., to see In-Patients affected with diseases peculiar to Women.

The Assistant Obstetric Physician, Dr. Pollock, sees the Out-Patients of this Department on Mondays and Fridays, at 1.30 p.m. Pupils, when properly qualified, attend cases of Lying-in patients under his superintendence.

OPHTHALMIC DEPARTMENT.—Patients suffering from Injuries and Diseases of the Eye are seen by Mr. Hartridge on Tuesdays and Fridays, at 9.30 a.m. Cases requiring operation are admitted into the beds especially allotted for this purpose.

SKIN DEPARTMENT.—Patients suffering from Diseases of the Skin are seen by Dr. Colcott Fox, on Wednesdays, at 1.30 o'clock; and severe cases are admitted to beds allotted for the purpose.

AURAL DEPARTMENT.—Patients suffering from Deafness and Diseases of the Ear are seen by Mr. de Santi, on Mondays and Thursdays, at 9 o'clock.

THROAT DEPARTMENT.—Patients suffering from Diseases of the Throat and Nose are seen by Mr. Spencer, on Wednesday and Saturday, at 9 o'clock.

ORTHOPÆDIC DEPARTMENT.—Patients suffering from Deformities of the Spine and Limbs are seen by Mr. Tubby on Fridays, at 3.30 p.m.

DENTAL DEPARTMENT.—The Dental Surgeons, Mr. Glassington and Mr. Gardner, attend at 9.15 a.m. on Wednesdays and Saturdays respectively.

POST-MORTEM EXAMINATIONS are performed by the Pathologist at 2 o'clock, as opportunities occur. Demonstrations of Morbid Anatomy are given on these occasions in accordance with the Regulations of the Conjoint Board, attendance upon which is now compulsory.

HOSPITAL APPOINTMENTS.

The following Officers of the Hospital are appointed by the House Committee, on the recommendation of the Physicians and Surgeons. In the event of the qualifications of the Candidates being equal, preference will be given to those gentlemen who have been educated at the Westminster Hospital Medical School.

A PATHOLOGIST, with a Salary of Fifty Pounds, and A CURATOR OF THE MUSEUM, and a MEDICAL AND SURGICAL REGISTRAR, each with a Salary of Forty Pounds.—These Officers are appointed annually in March, but are eligible for re-election.

TWO HOUSE PHYSICIANS, TWO HOUSE SURGEONS, TWO ASSISTANT HOUSE SURGEONS, AND A RESIDENT OBSTETRIC ASSISTANT.—These Officers are appointed for six months, and are provided with rooms and commons in the Hospital, except the Assistant House Surgeons, who are provided with commons only. Candidates are required to produce certificates of having acted for four months each as Out and In-Patients' Clinical Clerk for the office of House Physician, and Out and In-Patients' Dresser for the office of House Surgeon, as well as a certificate of proficiency in the administration of Anæsthetics. The House Physicians and Resident Obstetric Assistant will be selected after examination in Medicine and Midwifery respectively. For the office

of House Surgeon there will be an examination in Surgery every three months. The selected Candidate will serve for six months as Assistant House Surgeon, at the end of which he will, if approved, be appointed House Surgeon for a further six months. The dates for the commencement of Office are February 1st, May 1st, August 1st, and November 1st.

CLINICAL ASSISTANTS to the Assistant Physicians and Assistant Surgeons and ASSISTANTS to the Officers in charge of the Special Departments, may be appointed, on the approval of the House Committee of the Hospital, from amongst qualified Students, to assist in the work of the Departments.

CLERKS AND DRESSERS.—These offices are open to all general Students of the Hospital, nominated by the School of Medicine Committee, and appointed by the Hospital Board.

Every Student shall consecutively serve the offices of Out-Patients' Dresser and Clerk for a period of four months, and those of In-Patients' Dresser and Clinical Clerk for a period of four months, commencing January 1st, May 1st, and September 1st.

Two Pathological Clerks are appointed every four months, to assist in the Post-Mortem Room, and to work under the direction of the Pathologist.

No Student is eligible for any of these appointments until he has passed the second Examination of the Conjoint Board, or an equivalent Examination, and in no case shall a Student be permitted to hold two In-Patient offices at the same time.

Clerks and Dressers in the Special Departments of Hospital Practice are periodically appointed.

So far as vacancies permit, Students of other Hospitals are admitted to In-Patients' Dresserships or Clerkships.

The Wards are open to Students from 10 a.m. until noon, and from 1.30 to 5 p.m. daily. The In-Patients' Clerks and Dressers are required to commence their duties at 10 a.m., and to sign their names and hour of arrival in a book kept in the Secretary's office. Students who have passed the Second Examination of the Conjoint Board, or its equivalent, are encouraged to accompany the House Physicians and House Surgeons in their morning visits.

MUSEUMS.

The Anatomical portion of the Museum contains dissected Preparations of all the principal tissues and organs of the Body, and a series of Models in Wax, which are used to illustrate the Anatomical and Physiological Lectures, and the Students reading.

The Pathological Museum is furnished with Specimens illustrating all the principal Morbid Conditions of the Body, and the Injuries to which it is liable. A collection of casts give the external appearances presented by the specimens prior to dissection. Constant additions are being made to this department by the selection of Pathological specimens from the Post-mortem Room. A descriptive catalogue of the Pathological Specimens prepared by Mr. C. Stonham, with additions by the Curator, can be obtained of the Secretary of the School, price five shillings.

Obstetric preparations and specimens of Comparative Anatomy are used to illustrate the lectures on those subjects.

The Materia Medica Museum contains a complete collection of the Drugs and Chemicals of the British Pharmacopœia in addition to many others, some of which are of considerable rarity. There is also a duplicate set of Drugs and Chemicals for the use of Students preparing for Examination, together with a large collection of Botanical Specimens.

LIBRARY.

The Library is open daily from 10 to 5 (Saturday 10 to 2) *for purposes of study*, and a Librarian is in attendance, to supply the books for perusal, and to maintain order.

It is under the management of a Committee, appointed by the School of Medicine Committee, consisting of the Dean and two Lecturers, and two Students who have completed not less than two years of study at the Westminster Hospital School of Medicine, nominated by the Students.

The Entrance Fee of One Guinea is included in the general fees. Students who have entered for one or two Sessions may secure the same privileges by paying a fee of half-a-guinea.

GUTHRIE SOCIETY.

Meetings of this Society for Debates, the reading and discussion of papers of Professional and General interest, the exhibition of Physiological and Pathological specimens, &c., are held on the second Thursday of each month, at 8.30 p.m.

At least two Clinical evenings are held each year.

Members have the use of the microscopes and specimens belonging to the Society.

The Society subscribes to Lewis' Library for 23 Volumes for the use of Members.

Subscription, Life Members, £1 1s. in one payment on entrance, or five consecutive annual payments of 5s.

UNITED SPORTS' CLUB.

This Club—consisting of the Athletic, Football, Cricket, and Swimming Clubs, united in their management, and governed by a Committee consisting of Members of the School or Hospital Staff as well as Students—which was founded under its present conditions in 1893, is open to all Students of the School and Hospital.

The Entrance Fee, entitling a Student to Membership during his entire curriculum, is £2 2s.; and all new Students are strongly recommended to become Members at time of entering.

HOSPITAL STAFF.

Consulting Surgical Staff.

MR. HOLTHOUSE. MR. RICHARD DAVY. MR. COWELL.

Medical In-patient Staff.

DR. ALLCHIN. DR. DONKIN. DR. DE HAVILLAND HALL.

Surgical In-patient Staff.

MR. MACNAMARA. MR. T. BOND. MR. STONHAM.

Medical Out-patient Staff.

DR. MURRELL. DR. HEBB. DR. WILLS. DR. GOSSAGE.

Surgical Out-patient Staff.

MR. T. COOKE. MR. SPENCER. MR. TUBBY. MR. DE SANTI.

Ophthalmic Surgeon—MR. HARTRIDGE.

Obstetric Physician—DR. POTTER.

Assistant Obstetric Physician—DR. W. RIVERS POLLOCK.

Physician for Diseases of the Skin—DR. COLCOTT FOX.

Consulting Dental Surgeon—DR. WALKER.

Dental Surgeons—MR. GLASSINGTON. MR. GARDNER.

Surgeon in charge of the Throat Department—MR. SPENCER.

Surgeon in charge of the Orthopædic Department—MR. TUBBY.

Surgeon in charge of the Ear Department—MR. DE SANTI.

Administrator of Anæsthetics—DR. BOURNS.

Assistant Anæsthetist—MR. MACLEOD.

Pathologist—DR. HEBB.

Curator—MR. E. CANNY RYALL.

Medical Registrar—DR. PARKINSON.

Surgical Registrar—MR. PATON.

Secretary—MR. S. M. QUENNELL.

LECTURERS.

Clinical Medicine—DR. ALLCHIN, DR. DONKIN, DR. HALL.
Clinical Surgery—MR. MACNAMARA, MR. BOND, MR. STONHAM.
Clinical Gynæcology—DR. POTTER.
Medicine—DR. DONKIN and DR. DE HAVILLAND HALL.
Diseases of the Skin—DR. COLCOTT FOX.
Neurology and Insanity—DR. CHARLES MERCIER.
Elementary Practical Medicine—DR. WILLS.
Surgery—MR. STONHAM.
Ophthalmic Surgery—MR. HARTRIDGE.
Surgery of the Throat and Nose—MR. SPENCER.
Orthopædic Surgery—MR. TUBBY.
Aural Surgery—MR. DE SANTI.
Dental Surgery—MR. GLASSINGTON.
Anæsthetics—DR. BOURNS.
Operative Surgery—MR. STONHAM.
Minor Surgery—MR. TUBBY and MR. DE SANTI.
Surgical Pathology—MR. PATON.
Midwifery and Diseases of Women—DR. POTTER.
General Pathology and Morbid Anatomy—DR. HEBB.
Post-Mortem Demonstrations—DR. HEBB.
Materia Medica, Therapeutics, and Pharmacology—DR. MURRELL.
Demonstrator of Practical Pharmacy—MR. A. E. TANNER.
Forensic Medicine—MR. T. BOND and DR. POLLOCK.
Toxicology—DR. AUGUST DUPRÉ.
Public Health—DR. S. MONCKTON COPEMAN.
Bacteriology—DR. BLAXALL.
Anatomy—MR. BLACK.
Practical Anatomy, Demonstrators—MR. BLACK, DR. MARETT TIMS, MR. TUBBY, and MR. JAMES.
Physiology, Practical Physiology—MR. SPENCER.
Histology—DR. GOSSAGE.
Biology and Comparative Anatomy—DR. MARETT TIMS.
Chemistry—DR. AUGUST DUPRÉ and DR. H. W. HAKE.
Practical Chemistry—DR. H. WILSON HAKE.
Physics—MR. H. SOMERVILLE.

Treasurer of the School—DR. POTTER.
Dean of the School—DR. HEBB.
Vice-Dean—MR. TUBBY.
Secretary and Librarian—MR. W. FRYER.

PAST STUDENTS OF THE WESTMINSTER HOSPITAL.

LONDON.

ALCOCK, Sir RUTHERFORD, K.C.B., 30, Old Queen Street.
ALLEN, DAVID JOHN, 9, Ladbroke Terrace, Notting Hill, W.
AMBROSE, G. P., 1, Abbeville Road, Clapham Park, S.W.
ATKINSON, JOHN LANCELOT, 301, Shirland Rd., W.
AUSTEN, ALFRED WALTER, 30, Moreton Street, St. George's Square, S.W.
AYRES, CHARLES JAMES, 55A, Welbeck Street, Cavendish Square, W.
BAILEY, THOMAS WILLIAM, 68, Cheriton Square, Upper Tooting, S.W.
BARKER, ALFRED JAMES, 20, Beaulieu Villas, Finsbury Park, N.
BARNES, J. J. FREDERIC.
BATE, GEORGE PADDOCK, 2, King Edward's Road, Hackney, and 412, Bethnal Green Road.
BEADLES, ARTHUR, Park House, 35, Sunderland Road, Forest Hill, S.E.
BETTS, LEONARD BOWRING, 83, The Chase, Clapham Common, S.W.
BLOMFIELD, S. B., 7, Silverthorne Road, Battersea, S.W.
BRACKENBURY, HENRY BRITTEN, 92, Wightman Road, Harringay, Finsbury Park, N.
BRETT, THOMAS, 10, Coomb Terrace, Westcombe Hill, Blackheath, S.E.
BROOKES, ROBERT CHARLES, 137, Westminster Bridge Road, S.E.
BURT, CYRIL C. B.
CHUTE, W. H., 3, Burlington Gardens, Chiswick
CLARK, TOM, 1, Westbourne Street, Eaton Square.
CLAY, F. E., 109, Acre Lane, Brixton, S.W.
COLES, JOHN WM., 197 and 199, Camberwell New Road, S.E.
COOPER, HUGH ERSKINE, Wellesley House, Church Road, Upper Norwood, S.E.
CREIGHTON, E., Tankerville House, Greyhound Lane, Streatham Common, S.W.
CRONIN, EUGENE FRANCIS, Old Manor House, Clapham Common, S.W.
CROPP, EDWARD L.
CULLINAN, EDWARD, 331, King Street, Hammersmith, W.
DAWSON, ERNEST RUMLEY, High Road, Leyton, Essex.
DAVIDSON, FREDK. MONTGOMERIE DAVONPORT, 2, Streathbourne Road, Balham, S.W.
DE BRENT, MORTIMER JOHN, 36, Victoria Road, Clapham Common, S.W.
DENNE FRANCIS VINCENT, 5, Sterndale Road, West Kensington, W.
DEWSNAP, WILLIAM, 38, Shaftesbury Road, Hammersmith, W.
DOWN, GEORGE, 6, Ellison Terrace, Streatham Common, S.W.
DOWNES, G., Brooklyn, First Avenue, Hendon, N.W.
ELLIOTT, HORACE, Surg. R.N., Emery Hill's Hospital, Westminster, S.W.
FARRANT, C.
FLEMING, W., 18, Denington Rd., Hampstead, N.W.
FORSBROOK, WM. HY. RUSSELL, 139, Buckingham Palace Road, S.W.
FORSTER, HERMANN JULIUS, 8, Angell Park Gardens, Brixton, S.W.
FOSTER, WILLIAM J., 25, Wickham Road, Brockley, S.E.
GANDY WILLIAM, "The Hill Top," Central Hill, Upper Norwood, S.E.
GENGE, G. F. S.
GILLSON, WILLIAM ED., 34, Huntingdon Street, Barnsbury, N.
GLASSINGTON, CHARLES WM., 6, Pelham Crescent, South Kensington, S.W.
GODWIN, WILLIAM HENRY FRED. FENN, 89, Asylum Road, Peckham, S.E.
GOODSON, WM., Buckston Villas, 58 and 60, Leytonstone Road, Maryland Point, Stratford, E.
GOSSAGE, ALFRED MILNE, 54, Upper Berkeley Street, Portman Square, W.
GOSSAGE, WM. HERBERT, 54, Upper Berkeley Street, Portman Square, W.
GREENE, HY. BERTRAM BLODWELL, 20, North Street, Wandsworth, S.W.
GRIGGS, WM., Easton Lodge, Tressillian Crescent, St. John's, S.E.
GUBB, ALFRED SAMUEL, 29, Gower Street, W.C.
HADWEN, AURELIUS ST. JOHN, 88, Stamford Street, S.E.
HAGUE, JOHN LOCKE, Northern Fever Hospital, Winchmore Hill, N.
HAINS, WM. ROBT. HALL, 1, Aschurch Terrace, Shepherd's Bush, W.
HANCOCK, G. C., at Sea.
HAYDON, F., 55A, Welbeck Street, Cavendish Square, W.
HAYNES, J. R., 25, Cathcart Road, South Kensington, S.W.
HEARD, J., 8, Carden Road, Peckham Rye, S.E.
HENTSCH, JOHN PAGE, 174, Stockwell Road, Brixton, S.W.
HEPBURN, JOHN, Aberdeen House, Queen's Terrace, 3, Bridge Road, Hammersmith, W.
HOOK, W., 256, Ferndale Road, Brixton, S.W.
HORRIDGE, ALBERT C., 7, Avonmore Road, Kensington, S.W.
HUGHES, THOMAS C., North Western Hospital, Haverstock Hill, N.W.
HUMPHREYS, CHARLES STYLE, 50, Fairholme Road, West Kensington, W.
JACKMAN, CHARLES HOWARD, 11, Stoke Newington Road, and 37, Victoria Road, Stoke Newington, N.
JACKSON, PAUL, 51, Wellington Road, St. John's Wood, N.W. (retired).
JACQUES, E., Fir Grove, Buxton Road, S.W. (retired).
JAMES, GEO., Brooksbank, 1, Carlisle Mansions, Victoria Street.
JAQUET, JOHN LEWIS, Stones End House, Southwark, S.E.
JERMAN, A. E.
JOHNSON, JOHN JAMES, 54, Queen's Road, Peckham, S.E.
KEMPSTER, FELIX CHARLES, Oak House, 59, Bridge Road, Battersea, S.W.
KEMPSTER, C. R., 1, Queen Anne Terrace, Albert Road, Battersea Park, S.W.

KEMPSTER, WM. HY., Municipal Buildings, Lavender Hill, Battersea, and Chesterfield, North Side, Clapham Common, S.W.
KING, F. R.
LARDER, HERBERT, Whitechapel Infirmary, Baker's Row, N.E.
LECKIE, WALTER JAMES, St. George's Club, Hanover Square, W. (retired).
LEVY, OSCAR LUDWIG, 2, Vernon Place, Bloomsbury Square, W.C.
LOWNDS, CHARLES JAMES, 155, Balham High Road, S.W.
MACDONOGH, AUGUSTUS WM. (travelling).
MACKINLAY, J. R., 198 Camberwell New Rd., S.E.
MACLEOD, CHARLES EDWARD ALEX., 76, Ladbroke Grove, W.
MACNAMARA, E. D., 45, Campden House Rd., W.
MARCH, JOHN, Woodlawn, Spencer Park, New Wandsworth, S.W.
MARIN, FERDINAND BAPTISTE, 13, Courtnell Street, Talbot Road, Bayswater.
MILLS, HERBERT HY., 21, St. Mary Abbot's Terrace, Kensington, W.
MOORE, GEORGE LENNOX, 6, Hertford Street, Mayfair, W.
MOREY, JAS. W., 26, Walpole St., King's Rd., S.W.
MORGAN, HERBERT LAURENCE, 17, Harleyford Road, Vauxhall, S.E.
MORTIMER, JOHN DESMOND ERNEST, 22, Cheyne Gardens, Chelsea, S.W.
MUNYARD, THOMAS GUILLAUME, 151, Southampton Street, Camberwell, S.E.
NETTLETON, HARRY THOMAS, 4, Wisteria Road, Lewisham, S.E.
NEWBERY, WM. FREDK. HOYLE, St. Helen's, 109, Cazenove Road, Stoke Newington Road, N.
NITCH-SMITH, R., 47, Bessborough Gardens, S.W.
NORMAN, R. H., 325, Upper Street, N.
NORTON, JOHN, 54, Queen Anne's Gate, St. James' Park, S.W.
NOWELL, GEORGE HAROLD, Clarendon House, Mortlake, S.W.
OAKMAN, JOSEPH JOHN, The Priory, High Street, Battersea, S.W.
ORMSBY, G. H., 32, Albany St., Regent's Park, W.
OSBORN, ED. COLLET, Kensington Infirmary, S.W.
PALMER, FREDERICK STEPHEN, Compton Lodge, East Sheen, S.W.
PARKHOUSE, H., 86, Carlton Vale, Kilburn, N.W.
PASSMORE, WM. EDWIN, The Infirmary, St. John's Hill, New Wandsworth, S.W.
PEARSE, FRANCIS JAMES, 75, Warwick Sq., S.W.
PEARSE, GEO. EDMUND LEGGE, 15, Queen's Mansions, Victoria Street, S.W.
PEARSON, H. B. A., Ravenscraig, 36, Honeywell Road, Wandsworth Common, S.W.
PENNY, W. L., Morton House, Halliford Street, N.
PEPPERCORNE, FRANCIS, 36, Craven Street, Charing Cross, W.C. (retired).
PIPER, W. O., 85, Marney Road, Clapham Common, S.W.
PIPPETTE, WALTER, 1, The Terrace, Dawes Road, Fulham, S.W.
PLANT, JAMES ROBERT, 87, Earlsfield Road, Wandsworth, S.W.
POWELL, WM. WYNDHAM, 16, Old Burlington Street, W.
PRIDMORE, CAMPBELL WM., 116, Jamaica Rd., S.E.
PRITCHARD, EDWARD JOSIAH, "Branksome," Wandsworth Common, S.W.
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RUDD, ARTHUR, 493, Old Kent Road, S.E.
RYALL, CHARLES, Cancer Hospital, Brompton, S.W.
RYALL, EDWARD CANNY, 10, Bentinck Street, Cavendish Square, W.
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SMITH, NEWMAN.
SPICER, FREDERICK, 14, Carleton Road, Tufnell Park, N. (retired).
SPITTA, EDMUND JOHNSON, Ivy House, Clapham Common, S.W.
STONHAM, HY. ARCHIBALD, 30, Albert Square, Ratcliff, E.
SWAINSON, J. M. G.
SYERS, H. W., 4, Oxford and Cambridge Mansions, W.
TAPSON, JOSEPH ALFRED, Holmwood, The Grove, Clapham Common, S.W.
TILY, JAMES, 8, Brackley Road, High Road, Chiswick, Middlesex.
TWEMLOW, W. A. F., 45, Avenue Rd., Acton, W.
VERTANNES, C. A.
WALLIS, FERDINAND, 25, Bow Road, E.
WATTS, H. E., Eppingdale, Leytonstone, Stratford, E.
WATTS, ALGERNON NEWBEGIN, 26, Upper Wimpole Street, Cavendish Square, W.
WHITE, A. T., London County Asylum, Claybury, Essex.
WILLS, WM. ALFRED, 29, Lower Seymour Street, Portman Square, W.
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WILSON, F. K.
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COTTON, HY. HUGH POWELL, Clevelands, Hampton Wick.
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PART, JOHN SHEPLEY.
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SMITH, WM., Redditch, Worcester.
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VISE, J. N. B., Holbeach, Lincolnshire.
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WINCKWORTH, W. B., 3, Carlton Terrace, Taunton.
WITHAM, HENRY, 4, Augustine Terrace, Littlehampton, Sussex.
WOLSELEY-LEWIS, H., London County Asylum, Claybury, Essex.
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NAVAL, MILITARY, AND INDIAN MEDICAL SERVICES.

AXFORD, WALTER GODFREY, Surgeon R.N.
BAKER, GEO. LOWBRIDGE, Surgeon R.N. (retired).
BELL, ARTHUR SYDNEY GORDON, Surgeon R.N.
BELL, GEO. ALEXANDER STUART, Surgeon R.N.
BROWNING, GEORGE DANSEY, Surgeon, Lt. A.M.S., 16, Royal Terrace, Weymouth.
CALDWELL, ROBERT, Surgeon Captain Army.
CAMPBELL, JNO. ALEX. LANGFORD, Surgeon R.N., Wargrave, St. Edward's Road, Southsea, Hants.
CARROLL, EDWARD RICHARD WM. CHAS., Surgeon Capt. Bengal Army.
DAVIES, ARTHUR MERCER, Surg. Major Army.
DOWSE, HY. ESMOND, Surg. Capt. Army.
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GUBBIN, GEO. FREDERICK, Surg. Capt. Army.
HARVEY, THOMAS, Staff-Surgeon R.N. (retired), Exeter.
HENSMAN, FRANK HY., Surgeon Lieut.-Col. Army.
JAMES, LEO E., Surgeon R.N.
MACLEOD, EVAN CAMERON, Surg. Lieut. I. M. S., Bombay.
MACNAMARA, HUGH WINCKWORTH, Surgeon R.N.
MORGAN, FRED. JAMES, Surg. Capt. Army.
MUMBY, LANGTON PHILIP, Surg. Capt. Army.
PRATT, JAMES JOHN, Surg. Capt. Bengal Army.
QUICKE, WM. HY., Surg. Major Bombay Army.
ROBERTSON, Sir GEORGE S., K.C.S.I., Surgeon-Major, I. M. S., Bengal.
SCANLAN, ARTHUR DE COURCY, Surg. Capt. A. M. S.
SHARMAN, ERIC H., Surgeon Lt. Madras Army.
TREWMAN, GEO. TURNER, Surg. Major Army.
WALSH, JOHN HENRY TULL, Surg. Capt. Bengal Army.

PRACTITIONERS RESIDENT ABROAD.

ALLWORK, FRANK R., Riverton, South Australia.
BULL, S. A., Coromandel, Auckland, New Zealand.
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COPELAND, F., West Coast of Africa.
COURTEEN, RAYMOND.
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DOUGLAS, JAS. FRANKTON, Otago, New Zealand.
DOWLER, H. M., Assam.
DOYLE, E., Angel-Gaynes, Mayaro, Trinidad, West Indies.
DRYDEN, D.D., Fairlie, Timaru, Canterbury, New Zealand.
ELIOT, GEORGE GRENFELL, Canada.
FOX, STEPHEN CHAS. GUNDRY, Perak, Straits Settlement.
GIRDLER, GEO. TOUSSAINT, Kyber Pass, Auckland, New Zealand.
HART, HERBERT W., Cathcart, Cape Colony.
HEBBERT, C. A., Boston, U.S.A.
JAMES, D. P., Wellington, New Zealand.
LAYNG, HY., Swatow, China.
MACDONOGH, BERNARD, Coraki, N.S. Wales.
MCILROY, JOHN BLACK, Annandale, Sydney, N.S. Wales.
MORETON, F., New Zealand.
SMYTH, SYDNEY ROUXVILLE, Orange Free State, S. Africa.
TOWNE, H. R. F., Guthing, Basutoland, S. Africa.
WILLIS, FRANCIS, Ashville, North Carolina, U.S.A.
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